

**FREE**

**BOEING 747-8 POSTER**

www.airlin



# Airliner World

THE GLOBAL AIRLINE SCENE

**bmi**

Flies into **History**



**HONEYWELL'S  
BOEING 720**

*Last Flight*

**Estonian Air**

WAKING THE SLEEPING BEAUTY



**Bristol  
Britannia**

CLASSIC  
TURBOPROP



**North  
Korea**  
RARE IMAGES

**ZVARTNOTS AIRPORT** **ARMENIAN GATEWAY**

KEY August 2012

£4.40



9 771465 633133

08 >





## 05 News

Airline World's comprehensive coverage of world-wide news, including a picturespread with a sporting theme (the Olympics, rugby and football).

## 18 Air Transat's New Interior

Onboard one of the carrier's revamped Airbus A330s at Gatwick Airport.

## 28 Wind Tunnel Testing

How a new aircraft coating could save airlines money simply by applying it to the outside of the fuselage.

## 30 Estonian Air

Waking the sleeping beauty. The secrets behind the carrier's success and the establishment of a northern European hub at Tallinn.

## 38 Boeing 720 Test Bed - Final Landing

The end of the line for Honeywell's engine carrier.

## 42 Bristol Britannia

The 'Whispering Giant' celebrates its sixtieth anniversary.

## 53 Zvartnots Airport

Armenia's international gateway in Yerevan.

## 60 North Korea

A glimpse behind closed doors.



## 66 'View From Above' John F Kennedy

All the action from New York's busiest hub.



## 72 Deliveries

The latest commercial acquisitions.



## 78 Aviation Training

A review of recent developments.



## 80 Departure Gate

A selection of readers' comments and photographs.



## 84 Air Safety

Up-to-date accident reports and the most recent crash information.



## 85 CAPTION COMPETITION

Win a year's subscription to Airline World.

## 88 British Midland International - bmi

The final countdown - 75 years of history finally comes to an end.



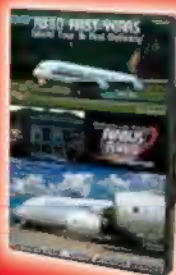
Ask your newsagent to reserve your monthly copy of **Airline World** today!

# Contents



## 66 John F. Kennedy 'View From Above'

# FREE DVD!



SUBSCRIBE TO  
**Airline World**  
FOR 2 YEARS AND  
CLAIM YOUR FREE  
AIRBUS A380 FIRST  
DELIVERY DVD  
WORTH £12.49!

Turn to pages 70 and 71 to find out more

# 30







**85** CAPTION **COMPETITION**  
WIN A YEAR'S SUBSCRIPTION TO AIRLINER WORLD



**competition**  
AUGUST 2012  
**Airliner**



# Welcome



## Airline World THE TEAM

**Tony Dixon**  
Editor

**Barry  
Woods-Turner**  
Assistant Editor

**Craig West**  
Assistant Editor

**Mark Nicholls**  
Contributing Editor

**Steve Donovan**  
Group Art Editor

**Andy O'Neill**  
Art Editor

**Andy Mason**  
Advertising Manager

**Danielle Tempest**  
Production Controller

**Sue Blunt**  
Production Editor

**James Forsyth  
Norman Wells**  
Sub-Editors

This page image •  
**KLM Fokker 70**  
(Gabor Szabo)

Airbus has revealed plans for an 'extra-wide' Economy seat to be fitted in single-aisle aircraft (see *International News* this issue). It is primarily designed for those of us who are 'wider in the beam' than others, but the manufacturer is also pushing it as a 'revenue generator' for airlines. Does this mean that larger people will be obliged to pay more, simply to sit in an aircraft, or that anyone else can purchase more space – at a cost? Of course 'Premium' seats are becoming more and more common for extra legroom – front rows, overwing exit rows, etc, but some carriers are now saying that even window or aisle seats could be sold at an extra cost. Forgetting the logistical nightmare that could ensue, it effectively means that couples or families will not be able to sit together without incurring an extra charge. I might be a little old fashioned, but if I buy two tickets on a particular flight, I would expect them to be next to each other without having to pay any extra. And what will happen when 'boarding is complete' – if people aren't happy

with where they are sitting, they will often move to a spare seat, so will cabincrew have to send them back to prevent them from getting 'enhanced' seating for free?



Front Cover Photo • British Midland International  
• bmi Airbus A319. (Airteamimages.com/Steve Flint)

The whole Editorial team will be at the Aviation and Transport Fair at Manchester Airport on July 14/15 and we look forward to meeting readers there. The latest *Airliner Classics* will be exclusively available at the event (before it goes on sale the following week). This year's issue includes articles on Manchester Airport, British Eagle, the Hawker Siddeley HS125, Braniff, the Douglas DC-7 and the early Boeing 737s. Don't miss it.

**Tony Dixon**  
Editor

*Tony Dixon*



**GROUP EDITOR-IN-CHIEF**  
Paul Hamblin

**COMMERCIAL DIRECTOR**  
Ann Saundry

**PRODUCTION**  
Production Manager Janet Watkins

**MARKETING**  
Marketing Manager Martin Steele

**EXECUTIVE CHAIRMAN**  
Richard Cox

**MANAGING DIRECTOR & PUBLISHER**  
Adrian Cox

**EDITORIAL & ADVERTISING OFFICES**  
Airliner World, PO Box 100, Stamford, Lincs,  
PE9 1XQ, UK. Tel: +44 (0)1780 755131  
Fax: +44 (0)1780 757261

**EMAIL:** [airlineworld@keypublishing.com](mailto:airlineworld@keypublishing.com)  
**WEB:** [www.airlineworld.com](http://www.airlineworld.com)

The entire contents of *Airliner World* is © copyright, and no part of it may be reproduced in any form or stored on any form of retrieval system without the prior permission of the publisher. All items submitted for publication are subject to our terms and conditions. These are regularly updated without prior notice and are freely available from Key Publishing Ltd or downloadable from [www.keypublishing.com](http://www.keypublishing.com)

We are unable to guarantee the bona fides of any of our advertisers. Readers are strongly recommended to take their own precautions before parting with any information or item of value, including, but not limited to, money, manuscripts, photographs or personal information in

response to any advertisements within this publication.

**SUBSCRIPTIONS**  
Subscriptions Manager Roz Conde  
Subscriptions Department,  
Airliner World (ISSN: 1465-6337), is published monthly by Key Publishing Ltd, PO Box 300, Stamford, Lincs, PE9 1NA, UK. Telephone/24-hour answer machine: +44 (0) 1780 480404. Fax: +44 (0) 1780 757812. E-Mail: [subs@keypublishing.com](mailto:subs@keypublishing.com)

Airliner World is distributed in the USA by Mail Right Int., 1637 Stelton Road B4, Piscataway, NJ 08854. Periodicals Postage Paid at Piscataway, NJ and additional mailing offices.

Readers in USA can place subscriptions by visiting [www.airlineworld.com](http://www.airlineworld.com) or by

calling toll free 800 676 4049 or fax 757 428 6253 or by writing to Airliner World, 3330 Pacific Ave, Ste 500, Virginia Beach, VA 23451-9828

**POSTMASTER:** Send address changes to: Airliner World, Key Publishing Ltd, c/o Mail Right International Inc, 1637 Stelton Road B4, Piscataway NJ 08854

**DISTRIBUTED (UK) BY:** Seymour Distribution Ltd, 2 Poultry Avenue, London EC1A 9PP. Tel: 020 7429 4000 Fax: 020 7429 4001

**PRINTED IN ENGLAND BY:** Warners (Midland) plc, Bourne, Lincs. UK



The average sale for the period Jan - Dec 2011 was 33,039 copies monthly



# Ryanair Hoping for Third-Time Lucky



EUROPE'S LARGEST low-cost carrier (LCC), Ryanair, has launched a takeover bid for Aer Lingus – the third bid inside six years. The surprise move came on June 19, with an offer of €1.30 per share; representing a 38% premium over the €0.94 closing price and valuing the Irish national airline at around €694 million. Ryanair already holds a 29% minority stake in the operator, with its attempted acquisition of the remaining shares coming just days after it was referred to the UK's Competition Commission.

The carrier attributes the timing of its offer to the ongoing consolidation of the European airline market, claiming that five major groups are likely to emerge – Air France-KLM, International Airlines Group, easyJet, Lufthansa and Ryanair – and says the best long-term prospect

for Aer Lingus will be secured within one strong Irish airline group.

Ryanair's previous two attempts were both rejected by the EU competition authorities, though it notes that circumstances have changed significantly since its initial bid in 2006. Significantly, it will take confidence from the recent mergers of Air France and KLM; Lufthansa's acquisition of Swiss International Air Lines and Austrian Airlines; and British Airways and Iberia's formation of IAG and subsequent purchase of British Midland International – bmi, all of which were received EU approval.

Ryanair says its offer also "represents the only means by which the Irish Government can ensure Aer Lingus will continue to be owned and managed in, as well as focused upon, Ireland".

The Irish Government has actively looked to sell its 25% stake in the carrier, with the Minister for Transport having previously indicated that it would not accept anything less than €1 per share.

The Irish LCC has also vowed to work with Etihad, which holds a 3% stake in Aer Lingus, should the Abu Dhabi-based operator acquire the Dublin government's stake, leading analysts to speculate that the bid from Ryanair may be an attempt to flush out other bidders. Ryanair's CEO, Michael O'Leary, commented: "This offer represents a significant opportunity to combine Aer Lingus with Ryanair to form one strong Irish airline group capable of competing with Europe's other major airlines. We believe this offer, if successful, will create value for our shareholders. We believe that by

lowering Aer Lingus' unit costs and fares, growing its business at some of Europe's major airports and competing with high-fare incumbents, we can significantly increase its profitability thereby earning superior returns for our shareholders."

It is not immediately clear whether the bid will be accepted, though a spokesman for Aer Lingus remarked: "The Board, having considered the offer with its advisers, believes the offer, even if it is capable of completion, undervalues Aer Lingus." Taoiseach Enda Kenny added that the Government would not be forced to sell its share in the national carrier, adding that it "will use proper and appropriate consideration to the right timing, to the right price and in the best interest of the country and the people."

(Photos Key Collection)





## BA Considers Fleet Renewal

BRITISH AIRWAYS (BA) has suggested that it may acquire additional Boeing 777-300ERs as an interim solution amid concern over the delivery schedules of new large twin-jets. The carrier is currently evaluating new wide-body aircraft, including the Airbus A350-1000, as part of a joint fleet renewal programme with sister airline Iberia.

The British operator's first of 12 A380 Superjumbos and 24 787 Dreamliners are due for delivery next year, later than originally planned. However, the carrier has coped with the delay by postponing the retirement of some of its older 747-400s.

BA ordered eight 777-300ERs – in part to

cover any potential shortfall in capacity – and, with the first A350s not expected to enter service until 2017, it may be forced to acquire further examples should development of the Airbus slip. Meanwhile, the airline has introduced a new interior on its short-haul 767 fleet. The first of seven jets has been upgraded as part of a multi-million pound programme and features refurbished sidewalls, bulkheads and toilets, new carpets and curtains as well as recessed ceilings with larger overhead lockers providing extra luggage space and new lighting throughout. The jet also features new seating in Euro Traveller Class.

Frank van der Post, BA's Managing Director, brands and customer experience, said: "We've created similar cabin interiors to our new 777-300ERs, which represent the new face of BA and have proved popular with passengers. Now customers travelling to a range of short-haul destinations will be able to enjoy flights with more comfortable seats, better in-flight entertainment screens and brighter, more contemporary cabins."

The short-haul refit programme began in January 2012 and will take 12 months to complete. The first of seven refurbished long-haul 767s returned to the carrier's fleet in February.

## easyJet withdraws from Madrid

LOW-COST CARRIER easyJet has confirmed that it will close its Madrid base this winter. The decision follows a review of the airline's operations from the Spanish capital, one of its worst performing European bases. The poor results were attributed to several factors including "over capacity in the Spanish airline market – leading to low revenue per passenger – combined with high airport charges (which have more than doubled in the last two years) and will be subject to further above-inflation increases in the coming years". The airline is expected to continue operating services to Spain.

## Smile for the Camera

German charter operator TUIfly has repainted one of its logojets, Boeing 737-8X5, D-AHFZ (c/n 30883), in this eye-catching red livery to promote CEWE Photo Books. The aircraft received its new colour scheme at Eirtech Aviation in Dublin. (Vivian Panat)



## Virgin's Canadian Expansion

VIRGIN ATLANTIC introduced a new, four-times weekly London/Heathrow to Vancouver service on May 24. To celebrate the inaugural flight, the airline's President, Sir Richard Branson was joined on the aircraft by Winter Olympic gold medallist Amy Williams MBE.

"I am delighted to be here to mark this occasion and especially pleased to be joined by Amy Williams who is undoubtedly the darling of British Winter Sport – she returned home to the UK from Vancouver in 2010 as a national heroine," commented Sir Richard. "We've had lots of people asking us to fly to Vancouver over the years, so we're delighted to launch this new route in response to customer demand. It's such a cosmopolitan city, full of culture, shopping and restaurants but it also offers stunning beaches and a range of outdoor adventure options on its doorstep. Vancouver's tourism is thriving and we believe that we can drive demand even higher by providing great competition

with our award-winning product and service. The UK has the largest number of overseas visitors to British Columbia each year so it's a natural addition to our network. This route launch further cements our position as the UK's leading long-haul leisure airline."

Amy Williams added: "Vancouver is a fantastic city and I am looking forward to being part of Virgin Atlantic's celebrations and to see what it's like now, and if it's still reminiscent of the Games."

The Honourable Christy Clark, Premier of British Columbia, remarked: "The UK is one of our key markets and also serves as a hub for other international travellers heading to our province. Virgin Atlantic is recognised around the world as a progressive and innovative airline and we are excited about welcoming their passengers to British Columbia."

The service, which will run until the end of October, is expected to carry 40,000 passengers this year. (Photo Virgin Atlantic)





## Budapest Celebrates 75 Years of CSA

CSA CZECH Airlines celebrated the 75th anniversary of services between Prague and Budapest on May 23. To mark the occasion, an event was held in the new Swing Lounge in Ferenc Liszt International Airport's Terminal 2B. The service, which operates up to five times a day, carries around 79,000 passengers each year.

Kam Jandu, Budapest Airport's director of aviation, said: "We are delighted to share this landmark celebration with CSA. Seventy-five years is a phenomenal milestone and we look forward to continuing our successful relationship into the future, providing travellers from both cities with this much needed connection." (Photo Budapest Airport)



## Nordic Heavy Lifter



Aerospatiale AS332C1 Super Puma, LN-DBX (c/n 2001), was an unusual visitor to Cardiff on June 9. Operated by Airlift Norway, the helicopter, named 'Obelix', is modified for heavy lift duties and was en route from France to Anglesey. (Phil Woods)

## Turkish Abandons LOT Deal

TURKISH AIRLINES has abandoned its plans to invest in LOT Polish Airlines. Ownership of the carrier is currently split between the Polish Government (68%), a regional economic fund (25%) and its staff, with LOT having confirmed plans to push ahead with privatisation as long ago as late 2010.

The Turkish carrier has been locked in negotiations since January with a view to acquiring the operator and has evaluated technical, commercial, financial and legal aspects as part of the due diligence process. However, a spokesman for Turkish Airlines confirmed that the carrier had subsequently withdrawn from discussions, adding: "It was decided

that Europe's long-established airlines, operating under the commercial and strategic rules of the European Union, have foreign ownership and management restrictions. In addition, overlapping administrative structures would inhibit maximisation of our shareholder value and would not bring the medium to long-term growth that was initially envisioned. As a result, the board of directors has decided to terminate work on participation in the privatisation process of LOT Polish Airlines."

Turkish Airlines added that it would continue to look at other strategic opportunities for medium to long-term growth as opportunities arise.

## Munich's New Runway on Hold

PLANS FOR a third runway at Munich Airport have been vetoed by local residents. The proposals had been approved by the Bavarian Government last year, but the City, one of the facility's three co-owners, put the plans to a public vote, with almost 55% of residents

opposing the expansion. The decision is a blow for the German aviation sector, with carriers having been recently hit by both the ban on night flights at Frankfurt and the delayed opening of the new Berlin Brandenburg Airport (see *Airline World*, July issue).

The Bavarian Government remains optimistic that the development will go ahead, but Lufthansa has suggested that it may be forced to relocate some of its passenger traffic to its Star Alliance partner hubs at Brussels, Vienna and the Swiss city of Zurich.

## Manx2 Goes Dutch



Isle of Man-based Manx2 has acquired a British Aerospace Jetstream 32, PH-DCI (c/n 916), on lease from Dutch operator AIS Airlines. The aircraft is presumed to be a replacement for Jetstream 31, G-CCPW, which was damaged in a landing accident at Leeds Bradford. (Phil Woods)

## in brief

Swedish carrier **Malmö Aviation** has acquired an Avro RJ85, OH-SAL (c/n E2392), from Blue1 of Finland on a two-year lease.

**Turkish Airlines** has terminated its partnership with B&H Airlines and has confirmed it will sell its 49% stake in the carrier, acquired in 2008, to the Government of the Federation of Bosnia and Herzegovina.

**Austrian Airlines** has acquired an Airbus A340-300 from parent carrier Lufthansa on a short-term wet lease to operate its Vienna to Dubai service. The operator, which is due to introduce a controversial austerity package cutting aircrew salaries by 25%, is struggling with staff shortages.

Figures released by London's **Gatwick Airport** show a strong financial performance for 2011. In the year ending March 31, the facility increased its turnover by 8.6% to £517.4 million while passenger traffic rose to 33.8 million.

**Vueling** has introduced a three-times weekly service from Southampton to its Barcelona/El Prat base. The flights are operated by the carrier's 150-seat Airbus A319s. (Photo Southampton Airport)



**Lufthansa Technik AERO Alzey** has signed a multi-year agreement with Tyrolean Airways to provide a spare engine pool for the its fleet of Pratt & Whitney PW150A-powered Bombardier Dash 8-Q400s.

**SkyWork Airlines** has announced plans to increase its London City to Bern service to three times daily from October. The Swiss regional carrier has enjoyed strong growth on the route, carrying over 11,000 passengers during its first year. However, reports in the local press have suggested the airline may axe its business charter project, FlyGiardino, just three months after taking delivery of two Beechcraft King Airs.

Hungarian low-cost carrier **Wizz Air** has extended its partnership with FL Technics to provide support for its two Vilnius-based Airbus A320s. The contract includes full line and light maintenance services including C and A checks, minor component replacement and servicing, logistics and storage of spare parts.

**NATS** and Thales UK have been contracted to install £10 million of equipment in Birmingham Airport's new control tower. Work is due to be completed by March 2013.



## Identity Crisis

Thomson Airways has acquired Boeing 737-8K5, C-FTLK (c/n 35143), from Sunwing Airlines of Canada for the summer season. Confusingly, the aircraft wears the full livery of Hapag-Lloyd Flug, though all three carriers are affiliated to the TUI Group. (Javier Rodríguez)



## Spain Announces Airport Closures

SPAIN IS to partially close up to 30 state-run airports in a bid to cut public spending as it battles with financial difficulties. The Ministry of Industry and Aeropuertos Españoles y Navegación Aérea (AENA), the government body which runs the country's 47 state-owned airports, is

considering plans to reduce operating hours with many of the facilities having no scheduled flights and handling less than 100,000 passengers each year. One of the worst performing airports, Castellon, was opened in March 2011 at an estimated cost of €150 million but

is yet to handle a single aircraft movement. Meanwhile, the terminal building at Huesca in northern Spain, dubbed 'the gateway to the Pyrenees', is fully staffed year-round, despite the only commercial flights operating during the winter. Subsidies paid to the airport by local

authorities were worth an estimated €1,600 per passenger, with the facility handling less than 3,000 during the whole of 2011.

A spokesman from AENA said: "We are analysing each one, airport by airport, to find where we can cut costs."

## Norwegian Sikorsky



A recent delivery to CHC Norway is Sikorsky S-92A, LN-00N (c/n 920057). The helicopter was originally delivered to CHC Canada in October 2007 and has spent time in both Malaysia and Australia. (Kjetil Petvik)

## Heathrow to Improve Efficiency

LONDON/HEATHROW Airport has launched an initiative aimed at improving its operational efficiency, reducing delays and improving flight punctuality. The Airport Collaborative Decision Making (A-CDM) system enables key parties, including airlines, ground handlers, air traffic control and airport staff, to share the latest and most accurate flight arrival and departure information. This allows operational teams to reduce taxi times and delays, with an automatically generated alert informing staff if an aircraft is likely to miss a slot, allowing action to be taken. The system, which is also in use at Paris/Charles de Gaulle, Frankfurt, Munich

and Brussels, increases efficiency, with Heathrow expecting to save up to 30,000 tonnes of CO<sub>2</sub> each year. "With more than 1,300 flights every day, it's crucial that we continue to look for ways to improve operational efficiency and thereby enhance passenger experience," BAA's Director Airside, Tim Hardy, commented. "A-CDM is about more than technology, it's about behaviour change. It relies on every area of the airport's operations working collaboratively to share information in pursuit of this common goal. We are excited to be launching this revolutionary new system and look forward to seeing the results."

## Gama Extends Ambulance Deal

GAMA AVIATION has been awarded a new contract by the Scottish Ambulance Service and NHS Scotland to provide essential air ambulance services. The deal, which originally started in 1993, covers a seven-year extension (running from 2013 to 2020). Gama uses several specially-modified aircraft to provide the service, including two Beechcraft King Air 200Cs based in Aberdeen and Glasgow along with a pair of Eurocopter EC135T2 helicopters at Glasgow and Inverness. The latter are expected to be replaced in 2014 by two brand new EC145T2s, these larger models offering improved range and more internal space to treat patients. Shetland and Aberdeen-based Super Pumas are also available to complement Gama's fleet as required.

"We're extremely proud of our long and successful association with the Scottish Ambulance Service and NHS Scotland and we're excited by the prospect of taking this into a third decade through the

award of this contract," said Gama Group CEO Marwan Khalek. "In formulating our bid, our focus was to ensure that we deliver a service that is safe, reliable and efficient yet responsive and adaptable to the changing healthcare needs and demand, and to do so in a cost-effective way so as to deliver value for money."

"We will continue to work tirelessly and diligently to meet and exceed the expectation placed upon us and we will do all we can to support the Scottish Ambulance Service and NHS Scotland in delivering a world-class air ambulance service to the people of Scotland."

Gama's core aircraft will provide dedicated air ambulance cabin interiors designed in conjunction with Scottish Ambulance Service personnel and incorporating the latest medical stretcher and patient loading systems along with a number of new technological enhancements. The helicopter fleet will be operated under a sub-contract by Bond Air Services. (Photo Gama Aviation)





## BA Boosts UK Domestic Capacity

THE INTEGRATION OF British Midland International – bmi into International Airline Group-owned British Airways (see *Airliner World*, June 2012) will lead to a significant expansion of the latter's domestic network this winter. From October 28, BA will add almost 27,000 extra seats on services between London and Scotland, including two additional flights from London/Heathrow to Edinburgh and to Aberdeen. It is also planning to launch a four-times daily

flight to Leeds Bradford. Meanwhile daily rotations on bmi's former Belfast service will increase to seven. British Airways CEO Keith Williams, said: "Bmi's integration is really enabling us to grow our network as we promised, giving customers more flights to destinations we know they want to fly to. We're focusing on new routes such as Seoul, Leeds Bradford and Zagreb, more flights to popular destinations and creating more connections for the UK regions to

our global network of flying."

BA is also planning to consolidate its operations at Heathrow, moving the former bmi routes to the Moroccan city of Agadir, together with Bergen and Stavanger in Norway, to its Terminal 5 facility. The services will be operated by British Airways, with the first bmi pilots and cabin crew having recently graduated from the airline's training programme (see 'The Final Countdown', pg 88). (Photo British Airways)



## Manchester Runs Dry

AIRCRAFT WERE left unable to refuel after stocks at Manchester Airport, UK, ran dry on June 6. Supply to the facility was interrupted following production issues at Essar Oil UK's Stanlow facility in Ellesmere Port, Cheshire. The problem was compounded by the four-day Bank Holiday weekend which had left the airport's on-site reserves depleted. Once supply was resumed, more

than 3 million litres of fuel was pumped overnight, allowing normal operations to resume the following morning. Chris Formby, Operations Director at Manchester Airport, said: "Although we initially warned about the potential for some cancellations and diversions based on the information from the fuel company... disruption to passengers [was]

kept to an absolute minimum thanks to the airlines and the Essar refinery." Despite the shortage, only 13 flights were delayed while 17 made fuel-stops at other UK airports. Airlines implemented contingency arrangements, with incoming flights told to carry enough fuel to complete the outbound flights from Manchester where possible.

## BAE Lands MoD Deal

BAE SYSTEMS has been awarded a £15.5 million contract from the UK Ministry of Defence for the conversion of two BAe 146-200QC aircraft for use by the Royal Air Force. The aircraft, which were acquired from Belgian air cargo carrier TNT Airways, will be used in both passenger and freight roles during the extraction

phase of Operation Herrick, the MoD's campaign in Afghanistan, where the type will augment in-theatre tactical aircraft such as the Lockheed C-130 Hercules. The regional jets were purchased, and are being converted, under an MoD Urgent Operational Requirement. Prestwick, Scotland-based BAE Systems Regional

Aircraft will be responsible for the design and integration of the military equipment (including a defensive aids system) to be fitted to the aircraft, while conversion work will be sub-contracted to Hawker Beechcraft Services at Broughton, North Wales. Delivery of both 146s is expected by March 2013. (Photo BAE Systems)

### in brief

British Airways' franchise **Sun Air** of Scandinavia will take over services from Manchester to the Swedish city of Gothenburg. The flight, previously operated by the now defunct Skyways (see *Airliner World*, July 2011 issue), will be reintroduced from August 27.

British regional carrier **Eastern Airways** has acquired former bmi Regional Embraer 145, G-EMBP (c/n 145300). The 49-seat aircraft is the airline's second example and joins a further two 37-seat ERJ 135s.

**Blue1** introduced a seasonal service from Helsinki to Budapest on June 2. The weekly flight, operated by a Boeing 717, will run until the end of September.

Spanish low-cost operator **Vueling** has launched a new VIP scheme, Vueling Pass, which allows access to lounges at ten European airports as well as preferential boarding on its flights. Costs €250, the pass allows up to ten lounge visits each year.

Spanish operator **Air Europa** has contracted Air France Industries and KLM Engineering & Maintenance to install a new Business Class cabin on two of its Airbus A330-200s.

**Brussels Airlines** has introduced a new uniform for 100 of its cabin crew and ground staff to coincide with the launch of its Brussels to New York/JFK service. The red and dark blue outfit, designed in co-operation with Belgian fashion house Kandres, will be worn by the carrier's 'New York Ambassadors' to promote its transatlantic route. (Photo Brussels Airlines)



Italian national carrier **Alitalia** has confirmed that its remaining McDonnell Douglas MD-82s will be phased out by the end of 2013. The airline currently has eleven examples left in service and has already retired six aircraft this year.

Channel Islands-based regional carrier **Blue Islands** has acquired Denim Air Fokker 50 PH-KXX (c/n 20262) on wet lease to replace its ATR 42, G-DRFC (c/n 007), which was damaged in an landing accident in Jersey on June 16.

Figures released by **ACI Europe** show a 2% increase in passenger figures during April 2012 against the same period last year. Despite this, the overall number of aircraft movements decreased by 1.8% while air cargo traffic fell by 4.2%.





## German Corporate Jet

This Airbus A319-133 CJ, D-ADNA (c/n 1053), is owned by German business jet operator DC Aviation. The aircraft is pictured at Manchester, UK, following maintenance work with Thomas Cook Airlines. (Nik French)

## Perfect at Biggin

SWISS CHARTER operator Perfect Aviation has announced plans to increase its presence at London/Biggin Hill. However, it notes that UK-based operators are likely to be at a disadvantage during the forthcoming London 2012 Olympic Games where their bases lie within what will be heavily restricted airspace. Instead, the carrier is hoping to take advantage of outbound traffic from the UK. Perfect Aviation CEO Will Curtis said: "Overseas business jet operators will likely take the lion's share of the business aviation traffic flying into London. Our strategy will be to fly our existing charter clients out of the UK to Mediterranean destinations especially. Ideally, we don't want our aircraft in the London area at all during the Games as we see the heavy restrictions as being detrimental to our productivity. We've seen similar situations with World Cup soccer events where the high hopes of operators ended up being frustrated by air traffic control restrictions and hiked airport fees."

## Air Finland Ceases Ops

AIR FINLAND ceased operations on June 26, suspending all flights and leaving around 1,000 passengers stranded abroad. The carrier, which has filed for bankruptcy, attributed its failure to high fuel prices, strong competition and overcapacity in the market. CEO Mika Helenius stated, "We failed to secure additional funding and have to cease our operations. We deeply apologise for the inconvenience this causes." The privately-owned airline was formed in 2002 and operated a fleet of four Boeing 757-200s to popular leisure destinations around the Mediterranean.

## Surprise Flight by Starlight

UK-BASED charity Starlight Children's Foundation teamed up with Formula One Management CEO Bernie Ecclestone and Embraer to fly four children to the Monaco Formula One Grand Prix in May. Ciaran Ross, Charlie Leech, Finn Denver and Jack Godfrey, all avid motor racing fans, were treated to the surprise weekend in Monte Carlo courtesy of the of the charity, which grants once-in-a-lifetime wishes to terminally and seriously ill children. The four were flown from Farnborough aboard an £18

million Embraer Legacy 650 business jet loaned by its Brazilian manufacturer. Neil Swan, CEO of the Starlight Children's Foundation, said: "We pride ourselves in being able to make dreams come true for seriously ill children and we're very grateful to Bernie Ecclestone and the F1 teams for supporting us and providing access-all-areas passes to the Monaco Grand Prix. I can't think of a better way to start our trip than being flown down in our own private jet, kindly donated by Embraer." (Photo Starlight)



## Norwegian Firms up NEO Order

LOW-COST CARRIER Norwegian has firmed up its January commitment for 100 Airbus A320neos. The 180-seat aircraft, expected to enter service from 2015, will be used to support the airline's growth and modernisation strategy. Norwegian's CEO, Bjørn Kjos, commented: "We are very pleased to be an Airbus customer and look forward to a close co-operation with a world-leading aircraft manufacturer. This order gives us an opportunity to secure and invest in the company's future. Brand new, fuel-efficient aircraft are necessary for us to continue to grow. From an environmental perspective, we know that Airbus is continuously working on measures to reduce emissions, making new aircraft a win-win for the environment, our passengers and for us as a company." Airbus Chief Operating Officer Customers John Leahy added: "We are very pleased to welcome Norwegian as an all-new customer. The A320neo sets new industry standards for eco-efficiency and passenger appeal." The neo will incorporate the latest generation of engines and 'Sharklet' wing tip devices to achieve a 15% fuel saving over the current A320 model.

## New Greek Start-up

Minoan Air is a new Greek regional carrier operating from Heraklion on the island of Crete. Pictured here is the airline's third Fokker 50, SX-BRV (c/n 20199). (Bjorn Vah Der Velden)







**AND THE PERFECT EMPLOYER**

**RECRUITMENT SUPPORT TO THE AVIATION INDUSTRY**

Zenon International recruitment service supports its clients in sourcing personnel for both their temporary and permanent vacancies.

Our reputation for quality service and rapid response times has been built over 30 years of industry knowledge, contacts and experience.



**ZENON**  
RECRUITMENT FOR AVIATION

Tel: +44 (0)1483 332000 • Email: [recruitment@zenon.aero](mailto:recruitment@zenon.aero) • [www.zenon.aero](http://www.zenon.aero)



**BRING A FEW EXTRA ROLLS OF FILM TO THE HOTEL**

**PLANE SPOTTERS' BREAK**  
Your stay will include a guaranteed

- Club Bedroom, overnight parking and access to the lounge with complimentary refreshments

**ROOM WITH A VIEW**  
Your stay will include a

- view of the London skyline from the rooftop terrace

**RENAISSANCE**  
Bath Road, Hounslow  
Middlesex, TW4 2AG  
Tel: 0181 606 1000

**R**  
**RENAISSANCE**  
A Marriott International Hotel



**KGAR**  
KG Aircraft Rotables

**24/7 AOG Support**

**Exchange, Lease & Sales**

**Worldwide Logistics**

**Specialists in Aviation Components**

**TEL: 001 954 670 7744 • FAX: 001 954 678 6048**  
Email: [sales@kgar.com](mailto:sales@kgar.com) • [www.kgar.com](http://www.kgar.com)





Iberia applied special markings to its Airbus A321-211, EC-JQZ (c/n 2736) in recognition of Spain's participation at the European football championships. The titles read 'Proud of Our Team'. (AirTeamImages.com/Steve Flint)

Unusual liveries and special markings are often inspired by sporting events. Several carriers have been decorating their aircraft to celebrate the recent Euro 2012 Football Championships, while other eye-catching colour schemes have stemmed from sponsorship deals.

## EUROPE SNAPSHOT **Sporting Themes**



Olympic Air's Airbus A320-214, SX OAU (c/n 4193), wears small decals to highlight the carrier's affiliation with the Greek Olympic Committee. (Lufthansa)



Irish regional carrier CityJet is an official sponsor of the Leinster Rugby Team and has painted Avro RJ85, EI RJX (c/n E2372), in this eye-catching livery inspired by the club's crest. (Paul Doyle)





SAS Scandinavian Airlines provided the official transport for the Danish national team to the 2012 football tournament, and applied appropriate markings to McDonnell Douglas MD-87, DV-JOH (c/n 53336), tail code

Air Berlin's Boeing 737-843, D-ABMB (c/n 36121), carries special titles on the nose to celebrate Borussia Dortmund winning both the German Bundesliga title and the DFB-Pokal domestic cup



Special liveries are not limited to Europe with several aircraft of Alaska Airlines affiliate Horizon Air carrying university-themed liveries. Bombardier Dash 8 Q400 N414QX (c/n 4061), wears a scheme inspired by the San Diego State Aztecs, the athletics and sports teams of the city's university.



The sports link is discrete on Dassault Falcon 7X, PH-AJX (c/n 102), though the registration is a clue – the aircraft's owner is a fan of AFC Ajax, while the 14 on the tail reflects the shirt number worn by the legendary footballer, Johan Cruyff





## Irkut's VIP Transport

United Aircraft Corporation/Irkut's Yakovlev Yak-42, RA-42412 (c/n 4530422219053), was an unusual visitor to Bordeaux/Mérignac in early June. The aircraft was operating a VIP flight from Moscow.

## Russia Eyes Long-Haul Market

RUSSIA'S UNITED Aircraft Corporation (UAC) is reportedly considering the development of a long-haul passenger aircraft in a joint venture with Chinese firm Comac. The former has pushed hard for a number of years to launch serial production of the Ilyushin Il-96-300, though plans have been blighted by a lack of interest from customers. However, potential development of

a new-generation long-haul aircraft was raised by UAC President Mikhail Pogosyan during the 2011 MAKIS International Aviation and Space Salon. The Deputy Minister of Industry and Trade, Yuri Slusar, has indicated that the project will be based around the Il-96 wide-body jet, though he did not specify a timescale or estimated cost. It is, however, most likely that the new airliner will

be launched officially once full-scale production of the Sukhoi Superjet 100 and Irkut MC-21 is under way.

It is not immediately clear how any joint venture between UAC and Comac would work in practice, though it is rumoured that the Russian firm will contribute intellectual property while the project will be funded by the Chinese, which will also be responsible for production.

## Four-Star Rating for Air Astana

KAZAKH NATIONAL carrier Air Astana has received a four-star rating in the Skytrax World Airline Awards, the first airline from the region to receive the rating. The operator has built on its success in recent years after ranking second in the "Best Airline: Eastern Europe" category in 2011.

"We proudly marked our 10th anniversary with a major network expansion last month and this prestigious four-star rating from Skytrax serves to further demonstrate the remarkable progress we have made over the past decade," said Peter Foster, President of Air Astana.

"Award-winning passenger service, new aircraft and an exciting new range of destinations are turning 2012 into a remarkable anniversary year for us. Congratulations to all our dedicated and enthusiastic service delivery staff for their outstanding achievement."

## VistaJet Secures Dexter Deal

VISTAJET, ONE of the fastest growing private jet companies in the world, has agreed a partnership with Russian air taxi operator Dexter Aviation. The deal follows a recent increase in demand across the CIS region and will result in VistaJet adding point-to-point services across Russia, as well as establishing a permanent base in Moscow, making it the first foreign operator of long-range, large cabin aircraft in the country.

Sergey Generalov, Founder of Fesco/Industrial Investors and owner of Dexter, commented: "We are delighted to be partnering with VistaJet in a move that will complement and extend our existing operations. We have established Dexter in a short period as Russia's preferred air taxi service and our highly discerning clientele will appreciate the luxury and service VistaJet will bring to their longer-haul flights both within Russia and internationally."

VistaJet Chairman Thomas Flohr added: "This announcement is a further important milestone for us. Russia has always been a major market, and the partnership with Dexter allows us to now also build a physical presence in this fast-growing territory. Russia epitomises the increase in founder-owned commodity and natural resource companies, currently driving the rapid growth of luxury aviation in the region."

VistaJet operates more than 30 Bombardier aircraft and has an order backlog valued at over \$2 billion - it is set to double its fleet size by 2015.



## First A319s for RusLine

Moscow/Domodedovo-based RusLine received a pair of Airbus A319-113S, VP-BDY (c/n 2442) and VP-BDZ (c/n 2446), in late May. The former easyJet colour scheme.





Siberian carrier Yakutia Airlines has applied special titles to Boeing 757-23N, VQ-BCF (c/n 27974), to celebrate its sponsorship of the 2012 Children of Asia International Sports Games to be held in Yakutsk. Rainer Borten

## Siberian Logojet

## Irkut Selects P&W

RUSSIA'S IRKUT Corporation has signed an agreement with Pratt & Whitney (P&W) to offer the PurePower PW1400G engine on the manufacturer's new MC-21 narrowbody aircraft. The geared turbofan is expected to produce between 25,000lb and 32,000lb of thrust and will be the only western powerplant offered on the Russian jet. Alexey I. Fedorov, President of Irkut remarked: "We are proud to offer the Pratt & Whitney PurePower engine on our MC-21 family of aircraft. The engine

makes our aircraft more competitive because it offers real savings for our customers." The PW1400G series engines use an advanced gear system allowing the engine's fan to operate at a different speed than the low-pressure compressor and turbine, offering significant improvements in fuel efficiency and emissions. First flight of the P&W-powered MC-21 is currently planned for 2015, with entry into service expected two years later.



## Q400 Lands CIS Approval

RUSSIA'S INTERSTATE Aviation Committee (IAC) has awarded aircraft type approval to Bombardier's Dash 8-400 for operation in Russia and the CIS.

"As part of our global expansion strategy, Russia and the CIS are key international growth markets. The type approval of the Q400 aircraft by the IAC is therefore a significant milestone in our growing presence in the region," said Mike Arcamone, President of Bombardier Commercial Aircraft. "The Q400 will deliver great performance and flexibility for operators seeking to meet the unique environmental challenges and longer distances in Russia and the CIS."

The granting of type approval for the Q400 paves the way for the acquisition of three examples for regional operator Saravia Airlines. The aircraft will be leased from Ilyushin Finance Co.

## UIA Partners Social Project

UKRAINE INTERNATIONAL Airlines (UIA) has partnered with technology provider Amadeus to deliver computers to orphans and underprivileged children in the southern Ukrainian city of Odessa. The two companies presented 20 appliances, which were funded by Amadeus and transported from Madrid to Odessa by UIA, to the Universal Aid for Children's Ukraine Fund for subsequent transfer to several institutions, including the

Fontanskaya Boarding School for Boys and a number of foster homes. "Corporate social responsibility is one of the company's priorities," commented Amadeus Ukraine's General Manager Aleksey Murovtsev. "We hope the charitable project implemented jointly with UIA will help children to receive a good education, to become travel industry professionals and to develop the tourist industry in Odessa."

Evgeniya Satska, UIA's Corporate Press Secretary added: "We regularly partner various social projects and are the official carrier of several Ukrainian delegations and sports teams. We are glad to take part in this charitable project and to provide children deprived of parental care with an opportunity to complete training using modern equipment, to receive high-quality education, and to choose a future profession."



## in brief

An opinion poll carried out by the **Russian Public Opinion Research Centre** reveals that the country's general public believe that air travel is one of the least safe methods of transport. This follows a string of fatal aircraft accidents in the country, with only boats and fixed-route taxis scoring lower – trains were voted as the safest.

**NPO Saturn** has been awarded EASA's Production Organisation Approval for its SaM136 engine. The company becomes the first Russian manufacturer to receive the certification, allowing it to freely produce the engine for the European market. (Photo NDP Saturn)



The **Russian Ministry of Defence** has confirmed plans to acquire over 100 heavy transport aircraft between 2014 and 2020. The deal, which is expected to include over 80 Ilyushin Il-76MDs, would provide a much-needed boost to the country's aircraft manufacturing industry, while an order for 25 Antonov An-124s may be sufficient to re-launch production of the type.

**Yamal Airlines** of Russia has acquired a Let 410 Turbolet for use on its regional routes. The Salekhard-based carrier, which operates services to the country's far north, is expected to add a second example to its fleet later this year.

**Skyworld Aviation** has completed the sale of two former Viking Hellas Airlines Airbus A320s to Ukrainian operator Aviatrans. The first example, EI-EEX (c/n 393), was delivered in late May with EI-EEY (c/n 414) following in early June.

Ukrainian carrier **Aerosvit** received its first two Embraer 190s, UR-DSA (c/n 494) and UR-DSB (c/n 501), on June 15. The Brazilian manufacturer 100-seat narrowbody jets are part of a five-aircraft order and will be used on services to Europe and the CIS.

Figures released by **Transaero Airlines** show that the Russian operator carried over 635,000 passengers during the first quarter of the year, an increase of more than 31% against the same period in 2010.

The **State Property Fund of Ukraine** has completed the sale of Kharkiv Airlines to an undisclosed buyer. The deal, valued at \$95,000 covers 99.9% of the available shares in the carrier.





Seldom seen outside the region, Feeder Airlines – 'The Pride of South Sudan' has been using this Boeing 737-33A, 4L-AJY (c/n 27452), on services from Juba since July 2011. The aircraft is leased from Vista of Georgia. (D. Bennett)

## Feeder Boeing

## Saudia Joins SkyTeam

GLOBAL AIRLINE alliance SkyTeam welcomed its first carrier from the Middle East when Saudia joined as its 16th member at the start of June. The carrier also took the opportunity to rebrand from Saudi Arabian Airlines back to Saudia, a name it had used between 1972 and 1996. It adds 51 new destinations to SkyTeam's global network, including 23 within Saudi Arabia.

Prior to joining SkyTeam, Saudia had embarked on a four-year turnaround programme, which will be completed by 2013. During the joining ceremony in Jeddah, the carrier unveiled two aircraft painted in the SkyTeam livery – a Boeing 777-200 (HZ-AKC) and an Airbus A320 (HZ-ASF) – see photo on page 15 last month.

## New Saudi Operator

SCHEDULED AND charter operator Emir Airlines is about to commence flights from its base in Jeddah, Saudi Arabia under a Part 121 Supplemental Licence from the country's General Authority of Civil Aviation (GACA). The third airline to operate in the country, it plans to conduct Hajj and Umrah pilgrimage flights to Jeddah and Madinah. It also intends to conduct other types of charter flights, including package tours, as well as leasing its B757-200 and B767-300ER to other operators in need of additional capacity on an ACMI basis.

## Emirates Celebrates Anniversary with A380 Flight

DUBAI-BASED carrier Emirates Airline is to operate the first scheduled Airbus A380 flight into Gatwick Airport near London on July 6. It will replace one of the normal daily Boeing 777-300ER services and will celebrate 25 years of the carrier using the airport.

"We have changed the face of UK air travel since we started at Gatwick 25 years ago," said Salem Obaidalla, Emirates' Senior Vice President, Commercial Operations, Europe and Russian Federation.

## Airlink Expansion

SOUTH AFRICAN Airlink has begun daily scheduled flights linking Johannesburg with Maun in Botswana bringing its network to a total of 29 airports served, of which 14 are international destinations. Flights will initially use one of the

airline's ten 37-seat Embraer ERJ 135s. It is, however, aiming to increase capacity with 83-seat Avro RJ85s as required. It operates up to 3,000 monthly flights and plans to carry just over one million passengers this year. (via Mike Wright)

## FastJet in Africa

A NEW pan-African low-cost carrier is being developed by the founder of easyJet, Sir Stelios Haji-Ioannou. Called FastJet, it took a step closer to becoming a reality after investment business Rubicon acquired control of existing African turboprop operator Fly540 from its parent Lonrho Aviation. Although the two businesses will initially operate as separate entities, the purchase will provide the

means for the budget airline to launch operations at an accelerated timescale, with first flights set to commence as early as September this year.

Fly540 has previously attempted to develop a low-cost model in Africa with subsidiaries in Kenya, Tanzania, Ghana and Angola, but these are on a very small scale and have been exclusively flying with turboprops.



## Korongo aircraft Still in Europe



While awaiting delivery to its new African subsidiary carrier, Brussels Airlines was still using this BAe146-200, OO-DJ (E2196), on European routes in June wearing full Korongo Airlines' livery. (Spencer Bennett)

## Dana Licence Suspended

FOLLOWING THE crash of Dana Air McDonnell Douglas MD-83, 5N-RAM (c/n 53019), on June 3, the Nigerian Government has suspended the carrier's Air Operator's Certificate. The 22-year-old aircraft had taken off from Lagos/Murtala Muhammed Airport and crashed approximately 2 miles (4km) away – all 153 on board were killed and there was an unknown number of casualties on the ground.



## Terminal Upgrades

RAS AL Khaimah International Airport in the UAE says it will invest \$544,500 in upgrading its airport terminal as it sets out to boost passenger traffic to two million in the next three years. The

airport operator is currently in talks with several low-cost carriers from India, Pakistan, the Philippines and Sri Lanka to expand their routes to the emirate, said Airport Director Andrew Gower.

"The work we are doing now will take our capacity to two million [passengers] from half a million. In terms of terminal development, it will be combination of buildings, roads, car parks, everything."

## Air Nigeria Offers iPad 3 IFE

IFE SERVICES of the UK has been selected by Air Nigeria to provide in-flight entertainment for the carrier's fleet of Airbus A330s. Passengers in Business Class will be offered a complimentary iPad 3 for the duration of the flight to watch Nigerian films, classic and latest release

Hollywood movies as well as a broad selection of comedy, lifestyle, drama and children's TV shows. Air Nigeria says it is the first African carrier to offer such a system to passengers as an in-flight entertainment solution.

Those seated in Economy Class can also

enjoy the latest Hollywood movies and a selection of TV shows on the aircraft's digital mainscreen systems

Air Nigeria operates domestic and regional flights and it links to ten countries in the West and Central African region.



## Passenger Growth at Abu Dhabi

ACCORDING TO figures released by Abu Dhabi Airports Company (ADAC), passenger traffic at the airport increased by 22% during April 2012 compared to 2011. Cargo traffic also continued to grow, reaching 45,261 tonnes, an

increase of 19% year on year.

"It is encouraging to be seeing sustained growth as we enter the second quarter of the year," said Ahmed Al Haddabi, COO at ADAC. "The positive performance in passenger traffic

this month demonstrates the airport's healthy growth, with more passengers choosing us to be their gateway to the rest of the world." Bangkok was the busiest destination followed by Doha, Manila, London and Jeddah.

## Zambezi AOC Suspended

IN MAY 2012 the Air Operator's Certificate (AOC) of Lusaka-based Zambezi Airlines was suspended by the Zambian Government on safety grounds. Despite an appeal by the airline, its aircraft were returned to the lessor and this example, Boeing 737-535, N614SC – ex-9J-ZJC – (c/n 29074), was delivered to Southend, UK in June for reallocation. The carrier's other

two aircraft (9J-ZJA and 9J-ZJB) were registered as N615SC and N616SC for their ferry flights to the UK for storage. However in June, the airline managed to source a Bombardier CRJ200 from South African Express and has restarted flights from OR Tambo Airport in Johannesburg to Lusaka. The carrier's country manager for South Africa Michael Mujajati said the airline

had learnt its lesson and would do its utmost best to stay in the market. He added that the company had resolved all the safety issues which were raised by the Zambian Civil Aviation Authority. (Photo Keith Burton)



## in brief

### South African Airways Technical (SAAT)

has signed an agreement with engine manufacturer Pratt & Whitney to conduct maintenance, repair and overhaul work on its engines. This will significantly enhance and expand SAAT's capabilities, resulting in the creation of more technical and engineering jobs. SAAT currently has the capability to repair and overhaul JT8 and JT9D series engines, and this 42-month agreement is for repair and overhaul work on JT9D 7R4G2s.

**Oman Air** will launch a new daily service between Muscat and the Iranian capital Tehran from September 1, 2012. The route will be operated using its Embraer 175 regional jets. "Tehran is a major business hub and we anticipate strong demand from both business and leisure passengers," said Wayne Pearce, Oman Air's Chief Executive Officer.

**Emirates Airline** has recently upgraded the IFE hardware on its Boeing 777 fleet to include much wider high-definition video screens in all classes for its iFC (Information, Communication and Entertainment) system. They will be 27in (68.6cm) in First Class, 20in (51cm) in Business Class and 12.1in (30.7cm) in Economy Class – the carrier claiming that the latter is the biggest in the world in that class. (Photo Emirates)



During the recent Wimbledon Tennis Championships, **Gulf Air and Sport 24** brought live coverage of the action as part of the airline's latest on-board TV offering – 'SkyHub'. It provides full broadband connectivity to access internet, mobile phone services and a global, live television service. It had previously broadcast live Formula One races and matches from the Euro 2012 football tournament.

A third new Airbus A321 has joined the fleet of **Royal Jordanian Airlines (RJ)** to serve medium-haul routes. The aircraft carries the name of the city of Madaba, southwest of the capital Amman and is part of the modernisation plan that RJ is undertaking to replace six of its A320s and A321s with seven new examples of the same types.

**Etihad Airways** has signed a contract with Airbus to equip 17 of the A320s that are on order with Airbus' fuel-saving Sharklets. The wingtip devices, which are 8ft 3in (2.5m) tall, are forecast to work best over longer sectors. Deliveries will begin in the third quarter of 2013.



Pen Air has aircraft based all across the U.S. This Saab 340B, N677PA (c/n 328), is pictured taking off from Anchorage, Alaska.

Known as Azul-Verde ('a greener blue'), the project began in November 2009 with the objective of developing a renewable jet fuel that could reduce greenhouse gas emissions. "Our commitment to reducing the dependency on volatile petroleum products goes beyond reducing our costs," said Flavio Costa, Chief Operating Officer of Azul Airlines. "The main objective is to innovate in our service offerings, using the best technologies to reduce our carbon footprint." (Photo Embraer)



airline now employs more than 8,600 people in 32 cities across Canada. It has recorded 28 consecutive quarters of profitability and is currently one of the most financially stable airlines in North America.

**A**irline  
**M**ore  
a  
an  
(MIA) June 1 the  
carrier is the latest new operate  
link to the Florida  
to fly daily  
joining American Airlines and Insel  
A Photo MIA





## DHL ends ASTAR Operations



ASTAR  
six Douglas D  
air network  
operation aircraft that  
demand grows.  
(Photo Joe G Walk)

## Silver Airways Growth

**REGIONAL CARRIER** Silver Airways, based at Fort Lauderdale, Florida, is looking to expand its routes across the state to serve more travellers. It launched a new daily scheduled service from Fort Lauderdale to Tampa and Gainesville on June 1.

"We intend to expand our network to include several other gateways in

Florida by year-end," said CEO Darrell Richardson. The carrier opened a new 61,000sq ft (5,667m<sup>2</sup>) maintenance facility at Gainesville Regional Airport in January – moving it from Fort Lauderdale airport due to its south runway expansion project.

Silver was formed from assets of Gulfstream International Airlines in

December 2011 after the regional carrier's parent company filed for Chapter 11 bankruptcy protection in November 2010. Chicago-based investment firm Victory Park Capital purchased Gulfstream in early 2011 and later rebranded it as Silver Airways. The carrier hopes to grow its fleet to 12 Saab 340B+s by September this year.

## LATAM Airlines Group Formed

**SOUTH AMERICAN** carriers LAN and TAM have completed merger formalities and formed a new entity – the LATAM Airlines Group. The partners claim the new group will offer passengers more flights to more destinations than any other in South America,

initially reaching around 150 destinations in 22 countries and transporting cargo to 169 airports in 27 countries. LAN and TAM will continue to operate under their existing brands.

"The creation of this group of airlines is an opportunity to take South America

to the world and to allow us to position ourselves to operate in an increasingly competitive environment due to the continuing consolidation of the global airline industry," said Enrique Cueto, LATAM Airlines Group's executive VP-CEO. (Photo LATAM)



### in brief

**Caribbean Airlines** has launched a twice-weekly non-stop service from Piarco Airport, Port of Spain, Trinidad and Tobago to Gatwick Airport, UK, becoming the fifth new long-haul carrier at the London hub this year. "Our flights will provide a vital link between London and the Caribbean," said Caribbean Airlines CEO Robert Corbie. "We are well positioned strategically to become the preferred airline for all customers flying between London and the Caribbean with seamless connections to South America."

**Brazilian carrier Azul Linhas Aéreas Brasileiras** has bought control of smaller rival TRIP for an undisclosed sum in a move that reflects growing consolidation efforts among the nation's carriers. Founded by Brazil-born entrepreneur David Neeleman, who formed JetBlue in the USA, Azul will own 80% of the combined company, which will in turn control about 14% of the nation's air travel market. The transaction is still pending regulatory approval. (Photo ATR)



**Skyworld Aviation** has been appointed by Air Vendée Investissement to sell an Embraer 190-100LR (c/n 00130) currently operated by Air Caraïbes. Being in operation in the French Caribbean, the aircraft is equipped to full EASA standard with the added advantage of having an HF radio installed.

The Uruguayan airline **PLUNA** is halting operations on the Santiago-Concepción route, blaming weather conditions (including fog) at the airports – which have forced the suspension of many flights and the transfer of its passengers to other companies (as the aircraft used has to return on the scheduled flight to Uruguay). (via Álvaro Romero)

**Calm Air International** has acquired an ex Olympic ATR 42-320 from Skyworld Aviation (plus an extra engine). The carrier serves the northern part of central Canada, and is based at Manitoba. It provides scheduled passenger services as well as charter flights for a variety of customers including government, corporate and community groups. The latest acquisition takes the total fleet of ATRs to eight, including two ATR 72s.

**Kansas City International (KCI) Airport** recorded 809,650 passengers arriving and departing through its gates in April, an increase of 4.7% from April 2011. Passenger boardings were also up, by 5.0%, with a total of 406,916 during the month. So far this year, boardings have increased by 7.0% over the same period last year.



# Air Transat's New Comfort Zone



CANADA'S LEADING holiday travel airline, Air Transat is celebrating its 25th anniversary this year, and is marking this milestone by refreshing its Airbus fleet with an internal and external facelift. Today, the carrier's network covers more than 60 destinations across 25 countries including a strong summer schedule of flights to Europe, while during the winter months it flies to the warmer climates of the Caribbean, Mexico and the USA. For an in-depth history of the airline, please refer to Air Transat – A Life of Leisure which appeared in the February 2011 edition of *Airliner World*.

## Internal Facelift

On June 12, Air Transat showed off the first aircraft to undergo the transformation to invited guests at Gatwick Airport. *Airliner World* was among those welcomed onboard Airbus A330-243, C-GTSL (c/n 427) to sample the redesigned cabin. The first impression is a good one – the 333 Economy Class seats are in a 3-3-3 configuration, but the centre three are offset, which breaks up the usual appearance of regimented rows.

Towards the front of the A330 is a remodelled Club cabin which has been reduced in size from 21 seats to just two rows of 12, set out in a 2-2-2 layout. The seats themselves are supplied by a relatively new name to the industry, German manufacturer ZIM Flugsitze, which benefits from employing former engineers who worked with Recaro. The seats themselves are an extra 2.5 inches (6.5cm) wider than those they are replacing and although not lie-flat, the seat bottom articulates forward when reclined to provide a more comfortable sleeping position.

In the back of each seat in the Club cabin are 12 inch (30cm) HD touch-screens which use IMS Company's RAVE In-flight entertainment system, with over 140 channels on demand. Caroline Soegtrop, Manager Customer Experience In-Flight Services explained the benefits: "The screens can be removed from the seat simply by using a special key, the films and TV pro-

grammes are stored on Secure Digital (SD) memory cards that are inserted into the unit, so updating the play listing is easy, you just plug-in another card. Should a unit breakdown it can be quickly exchanged for another by the cabin crew."

The slightly reduced size of the Club cabin means that there is more space in the Economy cabin which has also been further enhanced by the removal of the mid-cabin galley – a larger facility now being fitted at the rear of the aircraft. Passengers benefit from the same in-flight entertainment systems as Club, although their touch-screens are slightly smaller at 9 inch (23cm).

Nothing has been left out, Air Transat has even spruced-up the restrooms, using specially designed laminate materials and new toilet units, full-length mirrors and an LED lighting system.

Another innovation is an LED-based mood lighting system that is intended to enhance the passenger's flying experience. It has eight basic settings, although as the programme for the flight runs, a mixture of different hues and backdrops are applied, with colours taking between 30 seconds and six minutes to change, creating a series of carefully created mood settings, which the airline believes will help to reduce the effects of the dreaded jetlag.

However, all this use of technology comes at a price, each aircraft cost \$4 million to transform. But Air Transat believes it is money well spent, because not only will it improve the overall experience for passengers, but the combined cabin and seats are around two tonnes lighter than their predecessors and this equates to a 74,110gal (336,900lit) saving in fuel per jet each year (roughly

a \$300,000 saving) as well as considerable reductions in CO<sub>2</sub> emissions.

## Fleet Upgrade

As well as these impressive cabin upgrades, the carrier has also started to repaint its fleet in a vibrant new livery. A company spokesperson told *Airliner World*: "Two A330s have so far been modified at our Montreal, Quebec-base. A third aircraft is due to be delivered to TAM MRO in Brazil by the end of June to undergo heavy maintenance and during its stop there it will also undergo the cabin upgrade." Refurbishments for the remainder of the carrier's A330 fleet – it has eight -200s and four -300s – will be completed gradually over a two-year period. The three A330s with the new interiors will be in service this summer, flying on rotations from Gatwick, Manchester and Glasgow.

Once the upgrade of all its A330s is completed, scheduled for January 2014, Air Transat will turn its attention to achieving similar transformations of its A310 fleet. Currently it operates eleven A310s, but is planning to refurbish only six jets – the five older examples are due to be returned to their lessors when their leases expire in the 2015-2017 timeframe.

Asked how they were planning to replace the A310s, the spokesperson said: "There is no like-for-like replacement for the A310 available from the manufacturer, so we are currently looking at other options including second-hand Boeing 767-300ERs," although the airline has declined to say where they would be acquired from.

Air Transat has certainly upped the stakes in the highly competitive holiday air travel market, its remodelled cabins bring a fresh approach and in the words of the company's President and CEO, Allen B Graham: "We care more than ever about our passengers' in-flight experience, and the changes we are introducing on our aircraft address our ultimate objective: to deliver value-added tourism services and exceptional standards of quality."



Top • Air Transat's attractive new livery. (Airtreamimages.com/Dave Sturges, Above • The Club Cabin now has 12 seats, each with 12in HD touch screens. (Air Transat) Below • An example of the cabin mood lighting on the Airbus A330-243. (Air Transat)





## Bringing nations together in 2012.

Developing our capabilities, expanding our horizons, and working in partnership with the world's leading airlines to offer efficient, value-driven solutions and support 24/7.

✓ POWER BY THE HOUR

✓ INVENTORY LEASING

✓ MAINTENANCE, REPAIR & OVERHAUL

✓ TRADING, SALES, LOANS & EXCHANGES

✓ GLOBAL LOGISTICS SOLUTIONS

✓ 24/7 AOC SUPPORT

✓ ASSET MANAGEMENT

✓ GLOBAL CUSTOMER SUPPORT



The Global Component Service Provider

[solutions@avtrade.com](mailto:solutions@avtrade.com)

[www.avtrade.com](http://www.avtrade.com)





Landing at Sydney's Kingsford Smith International Airport on June 5 at the end of its inaugural service is this Boeing 777-212 (ER), 9V-OTC (c/n 28509), belonging to Singapore Airline's long-haul, low-cost subsidiary, Scoot. The carrier is launching flights to the Gold Coast, Bangkok and Tianjin shortly, while also planning to start links to Tokyo and Taipei from the third quarter of this year. (Seth Jaworski)

## Scoot Takes-off



## All Change in Bangkok

THE THAI Government has reversed an earlier decision restricting Bangkok to a single international gateway, Suvarnabhumi Airport, by agreeing to the reactivation of the capital's old Don Mueang facility, which was closed to commercial flights in 2006. Suvarnabhumi was originally designed for 45 million passengers a year, but this has already been surpassed, it handled almost 47 million during 2011 – and with any extension to capacity being at least five years away, it needs to act quickly to avoid over-congestion. The airport faces a crucial period which could compound the issue, as from August 1 to September 30 the facility's runways are being resurfaced – so Don Mueang is being offered as alternative, with discounts of up to 95% on take-off, landing and hangar fees to tempt airlines to use it instead.

To ease further congestion, Airports of Thailand, its operator, is opening the facility up again for commercial services and is suggesting it can handle up to 36.5 million passengers annually. It plans to entice airlines to transfer to the older facility by continuing to offer discounted fees. After September, it will be offered further cuts of – 30% from October 1, 2012 to September 30, 2013; 20% from October 1, 2013 to September 30, 2014; and 10% from October 1, 2014 to September 30, 2015. However, the relocation of airlines from Suvarnabhumi to Don Mueang must be voluntary. The Thai Transport Minister, has indicated that 14 commercial and charter carriers have already agreed to move to Don Mueang, and is proposing that the Thai Government adopt a resolution that will ensure the use of the old airport becomes permanent.

## New oneworld Member

SRI LANKAN AIRLINES, one of Asia's fastest growing carriers, has been invited to join the oneworld global alliance. It's expected that it will become a full member of the grouping in the fourth quarter of 2013. Cathay Pacific Airways is acting as sponsor and will support the Sri Lankan flag carrier through the

alliance implementation programme – which represents a remarkable turnaround for the company since peace returned to the nation three years ago after 26 years of civil war. The carrier has virtually doubled in size since then and is planning further expansion of both its fleet and network



## A Lucky Airbus

Kunming Wujiaaba International Airport-based Lucky Air took delivery of this, its first, Airbus A320-214, B-6943 (c/n 5172), on June 18. It's pictured here returning to Toulouse after a pre-delivery flight wearing test registration F-WWDP. (Eurosport)

## Grandstar Cargo Fails

GRANDSTAR CARGO International Airlines, the joint venture created by Sinotrans Air Transportation Development Company and Korean Air in 2008, is expected to be permanently closed. The carrier suspended all flights earlier this year as losses reached \$59.5 million. Its owners have been looking for potential investors to take over, but to no avail, so liquidation appears to be the only option available.



## CAE Training Centre for Korea

CANADIAN SIMULATION and training provider CAE is planning to open a new training centre in Seoul, Republic of Korea, initially to train pilots for the Boeing 737-800. The facility will be equipped with a full-flight simulator (FFS) and an integrated procedures

trainer. Additional training capabilities will be added as needed to serve carriers in Korea and Japan.

The CAE Seoul centre will be located near the capital's Gimpo International Airport and will be ready to start training its first students this autumn. The

company currently offers training services at 42 locations worldwide and this will be its second civil aviation training location in Korea – the other, offering third-party training on an Airbus A330 FFS at Asiana Airlines training centre, is also located in Seoul.



## Re-launch for Henan Airlines?

SHENZHEN AIRLINES is to end its partnership with Henan Airlines and plans to sell its 51% stake in the carrier – which suspended operations following a fatal accident on August 24, 2010 when one of its Embraer 190LRs, B-3130 (c/n 19000223), was destroyed

in a landing accident at Yichun Lindu Airport, China. Forty-two of the 96 onboard lost their lives and the aircraft was destroyed by fire. There is some hope for Henan Airlines: government-controlled Henan Civil Aviation Development Investment Co plans to

take it over with a controlling 70% stake through a reorganisation plan. This will pave the way for a re-launch of flights by the end of this year, although it has been widely reported that the carrier will focus mainly on cargo services initially, pending government approvals.

## Nordic Aviation Acquires CRJ1000s

SCANDINAVIAN LESSOR Nordic Aviation Capital A/S of Billund, Denmark, has ordered 12 Bombardier CRJ1000 NextGen regional jets and has already placed them with national carrier Garuda Indonesia. Based on current list prices, the contract is valued at around \$595 million. The airline became the largest user of CRJ1000s in the Asia-Pacific region earlier this year, signing a firm deal for six aircraft

further options. Its first jet from this initial deal was noted at the manufacturer's Mirabel facility in late June, and is due to be delivered to the customer in October as PK-GBA. A further five aircraft are expected to be delivered this year with 12 scheduled for 2013.

reliability and the lowest seat-mile costs in its market segment. We are therefore delighted to be acquiring these high-quality assets and assisting Garuda Indonesia in carrying out its business plan.

Nordic Aviation Capital is one of the world's largest lessors of regional airliners, with

### in brief

**Singapore Airlines** is adding a fourth daily service between Singapore and London/Heathrow from October. It currently operates three rotations a day using Airbus A380s – but the additional service will be flown using a Boeing 777-300ER. The new flights will be introduced progressively from September 9 until the full complement of 28 a week takes effect from the week beginning October 21.

**Air Lease Corporation** has signed lease agreements with Air China for five new Boeing 737-800s and four Airbus A321-200s. The aircraft will be delivered in 2013 and 2014 and are to be operated under 12-year leases.

**All Nippon Airways (ANA)** has adjusted its outstanding orders for Boeing 787s by converting four of the -8 version to the larger -9, giving it greater flexibility as it expands its international network. The airline has commitments for 55 Dreamliners (36 -8s and 19 -9s) and currently has seven of the type in service.

Airport lounge operator **No.1 Traveller** has revealed it's joining forces with national carrier Air China to offer its Business Class passengers travelling through Gatwick's North Terminal access to its award-winning No.1 Gatwick Lounge. Facilities include complimentary hot and cold food, a fully-tended bar, unlimited Wi-Fi, showers and stylish seating with panoramic runway views. (Photo No.1 Traveller)



**Tiger Airways**, the Singapore-based budget carrier, has acquired a 40% stake in South East Asian Airlines (SEAir) of the Philippines for \$7 million. Tiger purchased its stake in a cash deal and now holds the maximum permitted by a foreign company under Philippine law. SEAir operates seven aircraft, including two Airbus A319s leased from Tiger, and under this deal it will be able to sell seats on its flights through the Tiger website.

**Air China** has announced plans to launch a new airline in collaboration with the Inner Mongolian Government to help expand its domestic market share. The Chinese flag carrier will be the controlling stakeholder of the as yet unnamed entity and will use aircraft it already flies in the region. The start-up is subject to Civil Aviation Administration of China (CAAC) approval.



# Twentieth Boeing 747-8 Delivered

Atlas Air Worldwide Holdings has taken delivery of the 20th Boeing 747-8. The freighter will be operated on behalf of Swiss-based freight operator Panalpina and this marks the first time in the company's history that an aircraft has been painted in its livery. Called the Spirit of Panalpina, it was delivered initially to Hong Kong where it picked up a cargo of freight destined for Luxembourg. Atlas Air has ordered nine 747-8 Freighters, two of which will be operated for the carrier. Boeing



## Engine Milestone

GERMAN AIRLINE TUIfly and CFM International have celebrated a new first-run time-on-wing world record set by a CFM56-7B engine powering one of the airline's Boeing Next-Generation 737-800s. The engine has logged more than 50,000 hours without a maintenance visit – the first of the variant to achieve this total. (To put this into perspective, this is equivalent to driving the same car for 16 years with nothing more than oil changes and services, or flying 20 million miles with no engine removals.)

"This record is a remarkable achievement and we are delighted that the technical and flight operational assistance from TUIfly have made such a record possible," said Friedrich Keppler, the Managing Director of TUIfly.

The CFM56-7B engine was recently removed for LLP (life-limited part) replacement. Prior to this, it was said to be performing flawlessly and showed a very good EGT (exhaust gas temperature) margin – the primary indicator of an engine's fuel efficiency.

## Simulator Sales

TRAINING AID manufacturer CAE has announced contracts valued at more than Can\$65 million for four full-flight simulators (FFS), training devices and updates. They include the world's first FFS for the new AVIC Medium-Sized Transport aircraft, an Airbus A330-300 for Singapore Airlines, an A320 for the Zhuhai Flight Training Center (ZFTC) – a joint venture of China Southern Airlines

and CAE – and an Embraer 190/195 to an undisclosed European customer. The company has also sold simulator updates as well as a series of training devices to various customers. These include CAE Simfinity Integrated Procedures Trainers (IPTs), Airbus Procedures Trainers (APT), Flight Training Devices (FTDs) and CAE Simfinity Virtual Simulators (VSIM).

## CRJ200 Conversion



CANADIAN BASED refurbishment and conversion company, Flying Colours, has unveiled its latest ExecLiner conversion of a Bombardier CRJ200. The aircraft is configured for 16 passengers and is the company's ninth CRJ conversion.

It has been custom designed by the in-house team and features state-of-the-art equipment including a digital touch screen cabin management system, Airshow 4000, iPod connectivity and dual galleys. (Photo Flying Colours)

## BOEING DELIVERIES



Air Lease Corporation (ALC) has received its first new aircraft from its order placed during the 2010 Farnborough Air Show. The Los Angeles-based leasing company took delivery of a Next-Generation 737-800, HL8246 (c/n 41299) which will be leased to Korean Air. Boeing

Boeing delivered the following aircraft in May

737-800	29	ACG (3), Aerosvit, Air Berlin, Alaska Airlines, American Airlines (2), AWAS (2), BBAM, China Southern Airlines, COPA, Garuda Indonesia Airways, GECAS (2), Hainan Airlines, Japan Airlines, Lion Air, Norwegian, Pegasus Airlines, Shandong Airlines, Shenzhen Airlines, Southwest Airlines (3), Transavia Airlines, Turkish Airlines, Virgin Australia
737-800A	1	US Navy
737-800BJ	1	Boeing Business Jets
737-900ER	5	Continental/United (2), Korean Air, Lion Air, Turkish Airlines
747-800J	1	Boeing Business Jets
747-8F	2	Atlas Air (Panalpina), Cargolux Airlines
767-300F	2	Azerbaijan Airlines, UPS
777-200ER	1	AN Nippon Airways
777-300ER	6	Air China, Air France, Cathay Pacific Airways, Emirates Airline (3)
777F	1	FedEx
<b>Total</b>	<b>49</b>	



## 'Perfect Flight'

AIRBUS AND Air Canada have performed what they described as North America's first 'Perfect Flight' over international borders, with the goal of cutting CO<sub>2</sub> emissions by more than 40% compared to a regular flight. An Airbus A319 flew from Toronto, Canada to Mexico City and according to the companies "combined the use of a modern, state-of-the-art aircraft, powered by sustainable alternative fuels, guided by streamlined Air Traffic Management procedures and facilitated through best practice operations to underpin the industry's four-pillar

strategy to tackle carbon emissions." "The flight proves that the aviation industry is in a strong position to reduce emissions and fly many more 'Perfect Flights,'" said Fabrice Brégier, Airbus President and CEO. "To make this a day-to-day commercial reality, it requires now a political will to foster incentives to scale up the use of sustainable biofuels and accelerate modernization of the air-traffic-management system. We need a clear endorsement by governments and all aviation stakeholders to venture beyond today's limitations."

### AIRBUS DELIVERIES



The first Airbus A320 has been delivered to AirAsia Japan. The aircraft, JA01AJT-WWDH (c/n 5193) is pictured on a pre-delivery test flight.

Airbus delivered the following aircraft in May

A319	2	Avianca, Alitalia
A320	28	Air Arabia, AirAsia, Air China, Air France, Air Via, China Eastern Airlines (6), easyJet (3), Hong Kong Airlines, Indigo, Indonesia AirAsia, JetBlue, Jetstar Japan, Middle East Airlines, Philippine Airlines, Qatar Airways, Royal Jordanian Airlines, Spirit Airlines, S7 Airlines, 2i, Tianjin Airlines, Wizz Air
A321	4	Alr Berlin, Asiana Airlines, Sichuan Airlines, Turkish Airlines
A330-200	5	Airtanker, Alitalia (2), China Southern Airlines, Hawaiian Airlines
A330-300	3	Lufthansa, Malaysia Airlines, Turkish Airlines
A380-800	3	Air France, Lufthansa, Malaysia Airlines
Total	45	

## New Eclipse 550

FOLLOWING THE bankruptcy of Eclipse Aviation in 2009, a new company, Eclipse Aerospace, has been formed. With an established supply chain, a new Federal Aviation Administration (FAA) production certificate and a certified airframe, the new company has launched the Eclipse 550. An initial low-volume production run is planned and first deliveries are expected to take place in 2013. The first aircraft should take approximately 12 months to complete as the balance of the production line is being re-tooled and validated during the process. Full production for an estimated 50 to 100 aircraft per year is expected in 2014, depending on market demand. The new Eclipse 550 will include auto-throttles, synthetic vision, enhanced vision and a redundant flight management system.

## Wider A320 Seat

AT LEAST two US airlines are said to be interested in a new Airbus A320 cabin configuration that would provide wider aisle-seats – albeit at the expense of 'thinner' middle and window units. The manufacturer's 'Extra Wide Seat' is designed for the 'larger' passenger and is being marketed as a potential revenue generator for carriers. It is 21in (53cm) wider than the current standard A320 Economy seat (of 18in/46cm) and in a three-plus-three configuration, would be 20in (51cm) wide, while each middle and window seat would be narrowed 17in (43cm) – the same as a Boeing 737.

## in brief

**Bombardier Aerospace** has launched the Learjet 70 and Learjet 75, which will feature a newly designed interior, a next-generation cabin management system, the Vision Flight Deck with a fully integrated Garmin G5000 digital avionics suite, plus "superior aircraft performance and low operating costs". Entry-into-service is scheduled for 2013.

The **Federal Aviation Administration** has approved the installation of Aviation Partners Boeing's (APB) blended winglets on the Boeing 767 Converted Freighter (767BCF). APB claims that the additions will "reduce fuel burn by up to 500,000 gallons [1,892,700lit] per aircraft per year while reducing carbon dioxide emissions by over 5,000 tons per year." The winglets are also claimed to increase range by up to 320nm (593km) or payload by up to 16,000lb (7,257kg).

**Ameco Beijing** has started line maintenance for Finnair in Chongqing, China. The carrier is the third international customer for the company at the airport after Qatar Airways and TNT. Ameco has provided the same work for Finnair in Guangzhou and Shanghai since 2005 and 2009. (Photo Ameco Beijing)



**GKN Aerospace** has been awarded a contract by Boeing, to supply complex machined titanium and aluminium parts and assemblies for the horizontal stabiliser of the 787-9 Dreamliner. Manufacture and assembly work will be undertaken at GKN Aerospace facilities in Long Island, New York, and St Louis, Missouri, USA.

**Bombardier** has announced that the first CSeries is on track for a late 2013 entry into service. The manufacturer has begun a set of systems tests and simulations for the aircraft at the company's Mirabel, Quebec facility. "Over 200 components and systems for the aircraft are being tested worldwide and I am pleased to say that the data received so far is confirming our key performance targets and exceeding our expectations in many areas," said Bombardier Commercial Aircraft VP and GM-CSeries Rob Dewar.

Independent aircraft maintenance provider **Monarch Aircraft Engineering (MAEL)** recently completed a heavy maintenance C Check on behalf of UK based AirTanker Services, on one of its Airbus A330-300 Strategic Tanker Aircraft (FSTA) – called 'Voyager' in the RAF. The C Check was accomplished at MAEL's base maintenance facility at Manchester International Airport.

## Phenom 100s in the USA



THE FEDERAL Aviation Administration (FAA) has presented Embraer with its Production Certificate to assemble Phenom 100s in the United States. Previously, the aircraft have been certified under the FAA type certificate granted to those produced in Brazil.

"We opened this facility just over a year ago, delivered the first US-produced Phenom 100 in December and the first US-produced aircraft to go to an international customer in March," said Ernest Edwards, President, Embraer Executive Jets at the company's Melbourne,

Florida Headquarters.

The Embraer and FAA teams worked on quality manuals, procedures and product audits. They also carried out internal and external supplier visits to ensure all facets of production met the highest quality and safety standards. (Photo Embraer)



## New Airbus CEO

FOLLOWING THE promotion of Tom Enders, who has now taken over as the Chief Executive Officer of the European Aeronautic Defence and Space Company (EADS), Fabrice Brégier has been appointed CEO of Airbus. He was previously the company's Chief Operating Officer. "The target for the next five years is to make Airbus even stronger in developing and manufacturing the world's best aircraft," he said. "We remain focused on our business objectives, and while we implement some changes, we foresee overall continuity. Our priorities are providing stability for the production ramp-up, driving integration, and expanding our global footprint." (Photo Airbus)



## First Boeing 737-800 For Avolon

DUBLIN-BASED leasing company, Avolon has taken delivery of the first of 12 Next-Generation Boeing 737-800s that were ordered in December 2009. This aircraft will be operated by Japan Airlines.

"We are pleased to take delivery of this aircraft from Boeing," said John Higgins, President and Chief Commercial Officer of Avolon. "Key to delivering enhanced profitability for our lessees is selecting high-performance aircraft with superior fuel economy. Having a forward delivery stream of new aircraft, coupled with our industry leading sale and leaseback and other aircraft financing capabilities, provides our customers with a fully-rounded product."

## Enhanced Airport Safety Standards

AT THE International Civil Aviation Organisation's (ICAO) headquarters in Montreal, Canada, Council President Roberto Kobeh González has signed a Memorandum of Co-operation with Airports Council International (ACI) Director General, Angela Gittens to jointly pursue the highest possible levels of safety at airports worldwide. Its objectives are to:

- Support the development of the ACI Airport Excellence (APEX) in Safety Programme, designed to help airports worldwide to identify and address safety vulnerabilities
- Work together on technical assistance projects
- Exchange safety-relevant information and data by providing mutual access to databases.

"We have a long history of working together. The memorandum provides a framework for enhanced co-operation between our two organisations and reflects our continuing efforts to take a more action-oriented approach to promoting safety," said Roberto Kobeh González.

## Static Test Airframe Aired



In early June, Airbus moved its static test airframe for the new A350-900 between hangars at its Toulouse, France base. This was a rare exposure to the open air. It will never fly, but will be used for extensive testing of the aircraft's systems. (Photo Airbus)

## Executive Jets in China

BRAZILIAN MANUFACTURER Embraer has signed an agreement with Aviation Industry Corporation of China (AVIC) to build Legacy 600/650 executive jets in China, using the infrastructure, financial resources and workforce of the joint venture at the Harbin Embraer Aircraft Industry (HEAI) facility, which

started operations in 2002. The agreement is based on the potential demand of China's flourishing executive aviation market, and the two companies wish to extend their decade-long strategic partnership. HEAI's first executive jet is expected to be delivered by the end of 2013.

## First Dreamliner Flight at Charleston

THE FIRST Boeing 787 Dreamliner to be built at the manufacturer's Charleston South Carolina facility has completed its first flight.

"This is a proud moment for our team

here," said Jack Jones, vice president and general manager, Boeing South Carolina. "In April, we gathered on the flight line to watch this airplane roll out of final assembly. Now it has successfully completed its

first production flight."

The aircraft will be flown to Fort Worth, Texas, to be painted with Air India's livery before returning to Boeing South Carolina for a mid-2012 delivery. (Photo Boeing)



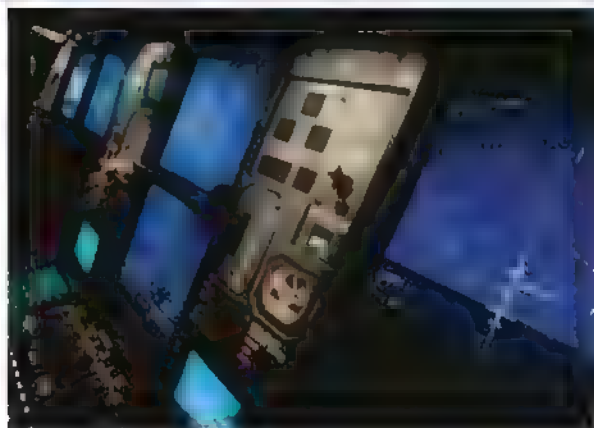




## THE AIR CADET ORGANISATION IS NOW SEEKING SUITABLE APPLICANTS FOR THE 2012 PILOT TRAINING COLLEGE PART SPONSORED CADETSHIP PROGRAMME



INTERESTED IN BECOMING  
A COMMERCIAL JETLINE PILOT?



**BOOK YOUR PILOT SKILLS ASSESSMENT TODAY!**

Apply on-line at [www.pilottrainingcollege.com](http://www.pilottrainingcollege.com)  
or call us on:

United Kingdom: +44 800 862 0230

Application closing date 31<sup>st</sup> August 2012



[www.pilottrainingcollege.com](http://www.pilottrainingcollege.com)

We measure ourselves  
BY YOUR SUCCESS



# Wind Tunnel Tests Point to Economy

**Tony Dixon watched as aircraft paint company Airbourne Colours and sealant specialist AGLaze proved a new finishing technique saves money for airlines.**

FOLLOWING THE *Airliner World* article on commercial airliner painting in the March 2011 issue, the Airbourne Colours company has gone from strength to strength. During 2011, it started working with Norfolk, UK-based sealant producer AGLaze to provide an extra coating following the painting of an aircraft that, as well as providing an impressive overall finish, would actually result in cost savings for airlines in terms of fuel usage by reducing drag on the airframe.

In late 2011, a six-month test was initiated using one of bmibaby's Boeing 737-300s, which was at Airbourne Colours' Bournemouth, UK base for painting. The airframe was then equipped with Boeing's Airplane Performance Monitoring system and the results of the test have shown a proven reduction of at least 0.8% in fuel usage – a 161-tonne saving per year for the aircraft based on a 7.5 hours a day usage.

However, the results were not definitive and needed to be scientifically proved, so time was booked at the Aircraft Research Association's (ARA) wind tunnel test facility situated to the north of Bedford, UK (conveniently located close to the old Royal Aircraft Establishment's Bedford/

Thurleigh test airfield).

A representative airliner model was mounted in the wind tunnel and painted with a standard (white) aircraft paint. A 30-minute test was then conducted at speeds of up to Mach 0.80 to get a base set of results before the model was repainted with the AGLaze treatment. Once it had dried, a further 30-minute test was undertaken and the results confirmed the practical testing made by the bmibaby aircraft.

"This is an exciting time for us," Matthew Darge, Operations Director of AGLaze, told *Airliner World* in the control room at ARA.

"We've always known that the sealant could potentially save on fuel usage – but to have it now independently confirmed gives further confidence to major airlines that they can dramatically improve their fuel efficiency and, in turn, help reduce their carbon footprint.

"We're proud to be an all-British company and have been providing a similar coating to carriers such as British Airways since the end of the 1990s. As the coating doesn't crack under expansion of metal or paint, it was ideal to use on the long-haul and Concorde fleets."

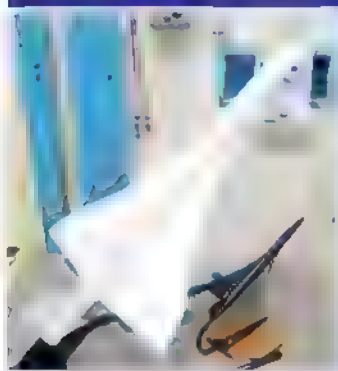
However, at that time, the cost of avia-

## Windtunnel

Aircraft Research Association (ARA) was set up in 1952 as an independent, non-profit-distributing research and development organisation and wind tunnel test centre for the UK's aircraft industry. Initially, the Society of British Aerospace Companies (SBAC) perceived the need for a large-scale transonic wind tunnel to keep UK industry at the forefront of aircraft research and development. At the time, no single user could afford to build such a facility on its own, so 14

major British aerospace companies – termed Council members – jointly raised £1.25 million in order to form ARA. The first wind tunnel was opened in 1956 by Prince Philip, the Duke of Edinburgh. Since the original one-off cash investment by the Council members, ARA has successfully expanded by continually generating sufficient revenue to meet its operational costs. Any surpluses are used to invest in the development of the facility and its staff. Today, the facility has worked for most of the major aerospace companies around the world and its Council membership is now composed of representatives from Airbus, BAE Systems, Dowty Rotol, Rolls-Royce and Westland – although, due to the nature of its work and commercial confidentiality, the members do not know who is leasing time in the facility or what projects are being tested.

ARA was set up in 1952 and has done work on many different types of aircraft – including the Aerospatiale/British Aircraft Corporation Concorde.



ARA's wind tunnel control room. (All images via ARA)



don fuel was not as large a proportion of overall operating costs as it is today, and the coating was used simply as a waterproofing and cosmetic improvement as it brought out the colours of the carrier's logos. It was not until last year and the bimibaby study that the savings benefits were looked at more closely.

"The coating is essentially a fluoropolymer – normally used in waterproofing techniques," continued Matthew. "We developed a technique for it to stick to any surface, bonding to existing epoxy resin [paint]. If used as a supplement to painting, the application takes three to four hours – as aircraft staging will be in place – and will last between 12 and 18 months. If reapplied without painting, we suggest an overnight stop in the hangar." The company also has products that are used in the automotive and boat-building industries – effectively being used as a sun block to preserve colours. The added weight is around one ounce (30g) for a 737-sized aircraft and the coating is applied via a cloth – just like polishing a car. Originally yellowish in colour, it is so thin that it cannot be seen. It is not used on glass on aircraft yet, but if applied to the windscreens of cars, the company claims that, in rain, windscreen wipers are not needed above 40mph.

"Airbourne Colours will be our exclusive applicator for the product worldwide on commercial aircraft and we believe it is a wise investment for the future. The price of the product will be paid off within a month – based on a 12-month respray," Matthew continued. "We're already working with an airline grouping – a new customer – to apply it to its fleets."

A representative airliner model was painted with a standard (white) aircraft paint before applying the fluoropolymer.



The AGIaze coating is essentially a fluoropolymer – normally used in waterproofing techniques.





# Waking the Sleeper

A total of five  
Estonian Air aircraft were  
purchased between 1996  
and 2000 for use on  
short-haul services.

**E**stonia is one of the smallest  
countries in Europe. While others have suffered from  
the recent financial turmoil, the Baltic  
state has fared far better, with its  
economy one of the fastest growing on  
the continent in recent years. This  
success has been mirrored by the  
national carrier, Estonian Air.



Sebastian Schmitz travels to the  
northern European country of Estonia to  
discover the secret behind the national  
carrier's success.

**"ESTONIAN AIR HAS REINVENTED  
ITSELF FOLLOWING A RECENT  
GOVERNMENT BUY-BACK."**



# Sleeping Beauty

which has reinvented itself following a recent government buy-back. For the new-look airline, its priority is simple: to take advantage of its rapidly expanding and conveniently located home base of Tallinn. One of the most significant elements of Estonian Air's realignment is its fleet renewal programme, which will bring about fundamental changes over the coming months. At the same

time, the carrier has also vowed to be a more competitive and cost-effective choice for passengers.

**Rebirth of independence:** Estonian Air was formed by the Government of Estonia in December 1991, just two months after the

The carrier's distinctive

livery has had a good effect on one of its new Embraer 175s.

nation had declared its independence from the Soviet Union. The carrier's initial services were operated by an ageing fleet of Soviet-built Yakovlev Yak-40s and Tupolev Tu-134s, which had been inherited from the local Aeroflot directorate, with the early, all-white colour scheme giving way to an attractive, national flag-inspired sky blue, navy and white livery.







The Boeing 737 family has formed the backbone of Estonian Air's fleet since 2005, though the type is now being replaced by the Embraer E Jet. Pictured here is 737 5LR, ES-ABI (c/n 29234), one of 12 operated by the carrier.

© Airphoto.com

Eager to align itself with its European counterparts, Estonian looked to replace its fleet with Western-built types and ordered two Boeing 737-500s directly from the manufacturer, the first of which, ES-ABC (c/n 26324), was delivered in June 1995. The arrival of two Fokker 50 turboprops a year later allowed the carrier to completely retire its Russian-built fleet, a move that coincided with a decision from the Estonian Government to privatise part of

the airline. With 66% of its shares put up for sale, the majority was acquired by Danish operator Maersk Air (49%), while Baltic Cresco Investment Group purchased the remaining 17%.

### Scandinavian Influence

In 2003, Maersk Air sold its entire stake to the SAS Group – the Sweden-based parent company of SAS Scandinavian Airlines would eventually become majority shareholder in Estonian Air, a position which it held until as recently as 2010. The acquisition coincided with a decision to withdraw the carrier's two remaining Fokker 50s, though by this stage, its fleet of 737 narrow-body jets had swelled to five examples.

Estonian's network had expanded significantly since its formation and covered many of the major cities around the Baltic Sea such as Stockholm, Copenhagen and Hamburg while other destinations included Frankfurt, London, Moscow and Paris. Growth continued into 2006 when it acquired its largest aircraft to date, former Air New Zealand 737-33R, ES-ABJ (c/n 28873).

Keen to branch out its network to include thin, short-haul routes, Estonian Air Regional was created in 2007. The independent subsidiary launched initially with a single Saab 340A (later adding a second example) on regional routes to the Estonian island of Saaremaa, the university town of Tartu and to the

ESTONIAN AIR - FLEET HISTORY			
Type	Number	From	To
Boeing 737 300	2	2006	2012
Boeing 737 500	10	1995	2012
Bombardier CRJ 900ER	3	2011	
Embraer 170	4	2012	
Fokker 50	5	1996	2003
Tupolev Tu 134	11	1991	1996
Yakovlev Yak 40	4	1991	1996
Saab 340A	2	2007	

Estonian Air received three Bombardier CRJ900 regional jets, including ES-ACC (c/n 15262), in early 2011. The order was originally placed in 2008 but was delayed due to the airline's financial difficulties.



Russian city of St Petersburg, just a short hop away from Tallinn.

However, despite its relative success, Estonian Air's fortunes took a significant downturn in late 2008. The carrier had looked to expand its fleet further, placing an order for three Bombardier CRJ900 regional jets, along with options for three more, but by November, the SAS Group had made a formal approach to the Estonian Government requesting a cash injection to save the airline and had offered to sell its majority stake. Several routes were axed and the carrier's ground-handling division was closed as it struggled to cope with difficult trading conditions, but a buy-

**"THE 88-SEAT BOMBARDIER CRJ900 WAS A GOOD SIZE FOR THE MAJORITY OF ESTONIAN'S ROUTES, BUT IT WAS NOT PERFECT."**

back was eventually agreed in 2010. Finance Minister Jüri Ligi announced after lengthy negotiations that the Estonian Government had agreed to purchase 39% of the SAS Group's stake, increasing its total shareholding to 90%, while the Scandinavian operator would retain the remaining 10%. The deal was unfavourable to the Estonian taxpayer and had been a bitter pill for the country to swallow, but a national airline providing essential connections from Tallinn was considered by the government to be crucial for the economy. An immediate capital injection stabilised the ailing carrier and allowed it to complete the purchase of two of the CRJ900s it had on order.



Bombardier CRJ900, ES-ACC (c/n 15262), of Estonian Air pictured following an early morning arrival from the Danish capital of Copenhagen.

Wholly-owned subsidiary Estonian Air Regional was created in 2007 to operate domestic and short haul services using two Saab 340As, including ES-ASN (340A 151).

### The Airline Today

At the time of writing, the government continues to own a 90% stake in Estonian Air. While this is not generally considered to be the breeding ground for a dynamic and innovative company, the situation in the small Baltic nation is somewhat different. The country has strongly embraced the digital era, with Estonia offering its citizens free internet access and a digital ID card system, and the option to vote online during the 2005 local elections was the first of its kind in the world. This mindset has also been applied to the national airline; despite its strategic importance, the government does not want a flag carrier that is a permanent drain on the

country's budget.

Tero Taskila, Estonian Air's newly-appointed CEO has been in post for barely 12 months but as he explains, the airline has for too long hidden its light under a bushel.

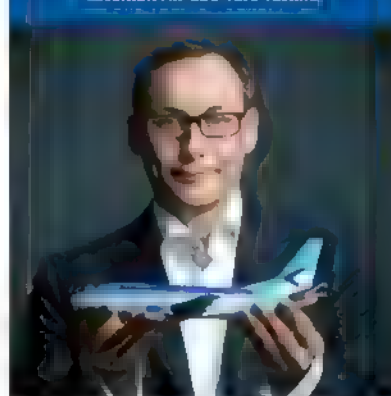
"I want everybody here to be bolder about what we are doing. In the past, we have almost belittled ourselves for being the small airline that we are. Estonian Air was like a sleeping beauty: lots of potential but lots of it lying idle. Today, this attitude has changed and employees are quite proud to work for the largest Estonian airline."

Since its formation, Estonian Air has been a traditional point-to-point operator. However, Taskila

>>

**"I WANT EVERYBODY HERE TO BE BOLDER ABOUT WHAT WE ARE DOING."**

Estonian Air CEO Tero Taskila







is keen to develop Tallinn into a regional hub, taking advantage of the convenient location of its home base. Understandably, the strategy has been warmly welcomed by the airport, while the airline is well positioned to become the facility's main customer. The informed observer may well recognise that this strategy is a very similar to that unsuccessfully adopted by another regional carrier, AirBaltic of Latvia. In fact, the link between the two airlines is far closer than mere geographical proximity – Taskila was formerly the Chief Commercial Officer at the Riga-based carrier before joining Estonian Air. His viewpoint is that a modest airline in a small country must use this model if it wants long-term success and growth. One of the main challenges, as for any business, is taking care of the bottom line and though the carrier already benefits from the relatively low labour costs in Estonia, optimisation of its fleet will be a key element in the airline achieving a higher profitability.

The much delayed delivery of the carrier's CRJ900s brought mixed reviews. The 88-seat regional jet was a good size for the majority of Estonian's routes, though Taskila noted that it was not perfect. An example is the carrier's

#### ESTONIAN AIR - CURRENT FLEET

Type	Reg'n	c/n	Config
Boeing 737-5LR	ES-ABL	28997	Y120
	ES-ACB	15261	Y88
Bombardier CRJ900ER	ES-ACC	15262	Y88
	ES-ACD	15276	Y88
	ES-AEA	17000093	Y76
Embraer 170STD	ES-AEB	17000106	Y76
	ES-AEC	17000107	Y76
	ES-AED	17000112	Y76
Saab 140A	ES-ASM	132	Y33
	ES-ASN	151	Y33

**"THE DEAL WAS UNFAVOURABLE TO THE ESTONIAN TAXPAYER AND HAD BEEN A BITTER PILL FOR THE COUNTRY TO SWALLOW, BUT A NATIONAL AIRLINE PROVIDING ESSENTIAL CONNECTIONS CRUCIAL."**

thinner services to the small markets of Trondheim in Norway or Jyväskylä and Joensuu in Finland, where the aircraft is too large to be operated economically. Conversely, the jet is too small for the trunk routes to Copenhagen and Stockholm where the carrier believes "the seat cost is king" and Estonian could easily fill a larger aircraft, particularly during peak times.

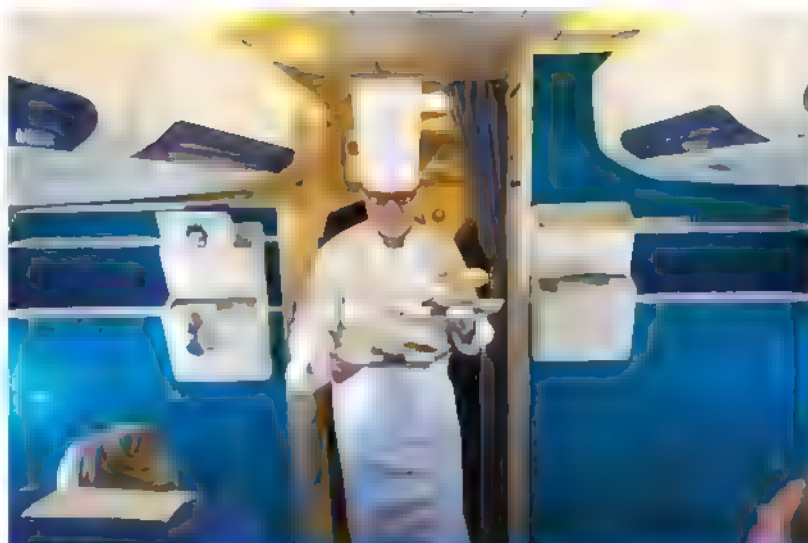
#### Estonian Goes Brazilian

With efficiency now at the forefront of the carrier's ethos, a February 2012 announcement confirmed that Estonian was switching its Bombardiers for Brazilian-built Embraer E-Jet narrow-body aircraft. The first four 76-seat E170s, operated on lease from Finnair, are now in service and will be joined by a further eight, brand new examples, a mixture of the larger E175 and E190s, from 2013. These aircraft will not only replace the Canadian-manufactured CRJs but also the remaining fleet of 737-500s. According to Taskila, the Embraer jets will give Estonian Air the flexibility it needs with the bonus of operating just one family of aircraft, which will help reduce costs in the long term. "Besides," he added, "They will give passengers more comfort and living space onboard."

• • • Boeing 737-505, ES-ABO (c/n 24646) wears a special livery to promote Tallinn's status as the 2011 European Capital of Culture (Anteamimages.com/Serge Baillet)

Below • Estonian Air was formed in 1991 following the country's independence from the Soviet Union. Initial services were operated using ageing Tupolev Tu-134As, including ES-AAN (c/n 8360560), and Yakovlev Yak-40s inherited from the local AeroFlot directorate. (Javier Rodriguez)





## Mile-High Fine Dining

In recent years, Estonian Air has proven itself to be very innovative and attentive, introducing several initiatives at the request of its passengers. The most delicious of these, at least for Premium Class customers, are its so-called 'restaurant flights'. Launched in September 2011, chefs from some of Estonia's leading establishments have been preparing their creations onboard some of the carrier's services.

**Airline World** was invited to join a restaurant night operating between Gatwick and Tallinn in late May. On this occasion, passengers were hosted by the Egoist Restaurant, one of Estonia's best, along with its managing owner, Daniel Dorgelmans, and Chef de Cuisine Heidi Pinnak. Travellers boarding the aircraft at Gatwick were greeted by two chefs sporting white jackets and traditional hats, inviting comments from passengers such as "will you be flying with us?" and "Is this the pilot's uniform?"

The two-and-a-half hour flight provided more than sufficient time for the two to prepare the meal of quail accompanied by mashed potatoes, followed by flambéed apples with cookie crumble.

The chefs also engaged with the Premium Class passengers during the flight, talking about the menu

and discussing their recommendations. Speaking of the challenges posed by the service, Mr Dorgelmans noted that one of the most difficult tasks was ensuring that the meals would fit on the smaller trays and plates that have been designed specifically for the aircraft ovens and trolleys. Aside from this, the other challenge is one that the average flight attendant is well used to – working in the small, cramped and noisy environment of an aircraft galley.

For the participating restaurants, however, special flights are an excellent occasion to showcase their offerings to a large, international audience, while for the airline it makes an unusual twist on the conventional in-flight service and an opportunity to stand out from its competitors.

As with the other restaurants that have participated, all from Estonia, the menu prepared by the Egoist was served for a one month period, before being replaced by another restaurant – this time, the historic La Bohème, with the meals changing depending upon the duration of the flight, the time of day and whether the service is going to or from Estonia. The scheme is set to continue until at least September, though given its success, is likely to be extended further. (Photo: Airline World)

The 737s, the backbone of Estonian's fleet for many years, will have disappeared completely by the end of the year. A solitary example, 737-5L9, ES-ABL (c/n 28997), will be retained until then and will be used mostly as a backup aircraft, while the carrier's fleet renewal programme will also be extended as far as Estonian Air Regional. The subsidiary's pair of Saab 340s are expected to be replaced by larger and more cost-effective turboprops later this year – the airline is yet to select a new aircraft, though both the ATR 72 and Dash 8-Q400 are likely candidates.

### Benefitting From Low-Cost Competition

Tallinn, like most major cities in Europe, is benefitting from increased capacity and competition from the continent's low-cost carriers, including Ryanair and Flybe Nordic.

"It is actually surprising to observe that we get quite good feed by them for some of our routes," reflected Taskila.

Below - Estonian Air's flight and cabin crew wear an attractive, dark blue uniform. (Photo: Airline World)

Bottom - Estonian Air retired its two Boeing 737-300s, including ES-ABK (c/n 28572), earlier this year. The type was the largest aircraft to be operated by the carrier to date.



"Many passengers will take a Ryanair flight to Tallinn and then connect to somewhere like Russia or the smaller cities in the region on our flights."

Estonia, although fast-growing and dynamic, is a very small market. In fact, it is potentially too small to even ensure the long-term survival of an airline. This is why Taskila talks of an "extended home market" which includes the three Baltic States of Estonia, Latvia and Lithuania, along with neighbouring Sweden, Norway, Denmark, Finland and Russia. Tallinn is ideally located in the centre of this region. Passengers travelling from secondary destinations such as Jyväskylä and Trondheim are generally expected to connect at a hub such as Helsinki, Oslo or Stockholm when travelling to anywhere other than a major capital city.

It is here that Tallinn hopes to take advantage as a smaller but more relaxing alternative to the region's busy hubs, something that is reflected in the 2012 summer schedule. Many new destinations have been added to its network, including the first international services to a number of the smaller markets in Finland, along with the European cities of Venice and Vienna. Some of the more unusual destinations,>>





Estonian Air Regional is expected to replace its two Saab 340As with either Bombardier Dash 8-Q400s or ATR 72s later this year.

#### ESTONIAN AIR DESTINATIONS

Amsterdam, Brussels, Copenhagen, Hannover, Helsinki, Joensuu, Jyväskylä, Kajaani, Kiev, London, Moscow, Nice, Oslo, Paris, Riga, St. Petersburg, Stockholm, Tallinn, Tartu, Tbilisi, Trondheim, Venice, Vienna, Vilnius

#### ROUTES OPERATED BY REGIONAL PARTNERS

##### Route

Helsinki to Kiev  
Helsinki to Riga  
Helsinki to Vienna  
Riga to Vienna  
Riga to Amsterdam  
Stockholm to Tartu  
Stockholm to Riga  
Stockholm to Tbilisi  
Stockholm to Vilnius  
Tartu to Trondheim  
Vilnius to London  
Vilnius to Moscow  
Vilnius to Stockholm  
Vilnius to Vienna

Estonian Air's Boeing 737-33R, ES-ABJ (c/n 28873), was one of two aircraft to wear special titles promoting Tallinn's position as the European Cultural Capital in 2011.

such as Hannover, have been surprisingly popular with Estonian Air having cornered the market in what is emerging as a niche route to the central German city. Furthermore, the carrier has increased the number of daily rotations to Brussels and Amsterdam to make up for the smaller aircraft size and this move has made the routes more attractive to passengers. Further expansion of Estonian's Tallinn network is looking very likely in the near future, with the airline considering a shortlist of approximately 25 potential destinations.

#### The Passenger Experience

Eager to increase its appeal, Estonian Air has actively encouraged feedback from its customers, embracing many of the suggestions they put forward. Particularly noteworthy was the desire from passengers for the carrier to be distinctively Estonian in its offering. As such, the airline introduced a new selection of meals on its onboard menu with local restaurants providing typical regional dishes – the carrier even arranges monthly 'restaurant' flights featuring accomplished and established chefs (see panel).

Another request that Estonian has implemented is a simple fare structure, with passengers being shown the entire cost, without hidden fees or taxes, when selecting a flight. Furthermore, and unlike many of its European counterparts, the carrier does not offer optional extras such as travel insurance or accommodation, making the booking process far easier and more transparent.

Estonia's status as one of the most internet-affine countries in the world means that the importance the national carrier places on social media is unsurprising. The operator has a strong



presence on Facebook and used the website to host its recently launched loyalty programme AirScore, the first of its kind by an airline. Estonian Air's social media expert Maarja Ojamaa explained that, unusually, members of the programme can earn points without ever setting foot aboard an aircraft. Instead, rewards are earned by sharing stories about the home country of the airline, participating in quizzes or even encouraging friends to join the programme. Points can be used to discount future bookings, or even to meet with the CEO. Ultimately, the goal for the carrier is to improve brand awareness and customer loyalty... and by basing it on a widely-used social media outlet such as Facebook, it is easy for the airline to stay in touch with current and potential customers.

"EACH YEAR, AN INCREASING NUMBER OF TOURISTS VISIT THE BALTIC STATE AND ITS CAPITAL, BENEFITTING BOTH TALLINN AND ESTONIAN AIR."

In addition to the web-based AirScore, Estonian Air is also a member of the SAS Eurobonus frequent flyer programme, allowing passengers to earn miles in the more conventional manner.

Last year, Estonian Air marked its 20th anniversary by carrying over 678,000 passengers, an increase of 16.4% against 2010 and enough to make the airline one of the fastest growing in Europe. This number is expected to rise even further as the carrier brings more new destinations online during 2012, with the majority of these additional passengers expected to pass through the carrier's home base of Tallinn.

Estonia has found success during a period of economic turmoil, something reflected by the growing number of air travellers to and from the country. Each year, an increasing number of tourists visit the Baltic state and its capital, benefitting both Tallinn and Estonian Air. As this article goes to press, the national carrier's fleet renewal programme is well under way, and it will be interesting to follow the turnaround of this innovative and ambitious little airline over the next few years. *2012*





airline [www.airlinesimulation.com](http://www.airlinesimulation.com)

[www.airlinesimulation.com](http://www.airlinesimulation.com) GPO Box 1361 Sydney 2001 Australia



## Airbourne Colours

Quality. No compromise

Call us on + 44(0)1202 233737

- Airbourne Colours has a dedicated narrow body paint facility with EASA145 coverage.
- Offers highly competitive pricing with minimum downtime for your aircraft.
- Airbourne Colours is pleased to unveil A Glaze – an aviation paint sealant that saves fuel.
- For further information please contact Andrew Tarry, sales and marketing manager, +44 (0) 7534 133 787 Email: [andrew.tarry@airbournecolours.com](mailto:andrew.tarry@airbournecolours.com)
- Visit Airbourne Colours at the Farnborough Air Show on stand FT9 in Hall 4

# AIRPORTS

INTERNATIONAL

# Air Traffic

Management

Brought to you by the editorial teams behind  
Airports International and Air Traffic Management  
magazine, our new websites feature:

## LATEST NEWS

Read all the latest industry news as it happens  
with detailed analysis and features from our  
dedicated editorial team

## ONLINE DIRECTORY

With hundreds of listings, our free-to-access  
directories are the most comprehensive  
online resource available

## EVENTS

Detailed listings of must-attend events and  
shows from around the world

## JOBS

The latest industry vacancies, updated daily  
to help you find your perfect role

Log on now at

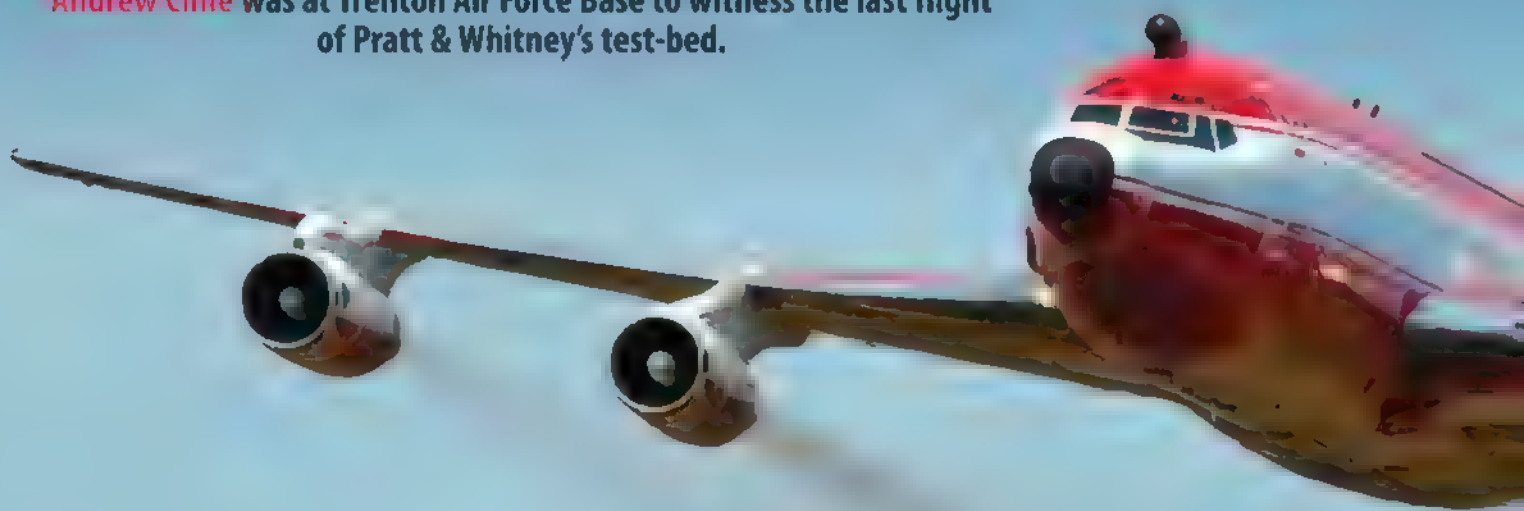
[www.airportsinternational.com](http://www.airportsinternational.com)

[www.airtrafficmanagement.net](http://www.airtrafficmanagement.net)



# Final landing of Canadian Boeing 720

**Andrew Cline** was at Trenton Air Force Base to witness the last flight of Pratt & Whitney's test-bed.



**T**he latest addition to the National Air Force Museum of Canada (NAFMC) arrived on May 9, 2012, in the shape of the last flying Boeing 720-23B, C-FETB (c/n 18024). The brilliantly red and white painted aircraft is a specially-modified engine test-bed that has been operated by Pratt & Whitney Canada (P&WC) for over 20 years.

The 720 is a smaller-capacity, lighter, medium-range variant of the 707. One of only 154 of the type built, C-FETB made its first flight at Boeing Field on

Two flypasts were carried out on arrival at Trenton, both at low level. The first was a clean pass with gear up, the second a dirty pass with gear down.

Boeing 720, C-FETB, touched down for the last time at 15:34 on May 9, 2012 on Runway 24 at CFB Trenton.

January 14, 1961, and was delivered on February 3 to American Airlines as N7538A, named *Flagship Idaho* and operated with the US carrier for ten years. It was then bought by Middle East Airlines in September, 1971 as OD-AFQ, before being purchased by P&WC in December 1985, where it was custom-registered as C-FETB – 'Flying Experimental Test Bed'.

Over the next two years, it underwent an extensive conversion from a standard passenger 720 to a heavily modified engine carrier with numerous airframe

and internal changes, and it made its first operational engine test of an International Aero Engines (IAE) V2500 turbofan in May 1988.

The 720 replaced a number of other engine test-bed aircraft, including two Beechcraft King Aircrfts, two Cessna Citations, two Learjets and a former Trans Canada Air Lines (TCA)/Air Canada Vickers Viscount 757, C-FTID (c/n 384), which were used for testing turboprops and fanjets between 1975 and 1988.

P&WC maintained four pilots and two flight engineers on the 720, while a





**"WE ARE THRILLED TO HAVE THIS HISTORICAL PART OF OUR FLIGHT TEST OPERATION DISPLAYED AND PRESERVED."**

Marc Kirner, Director Flight Operations of P&WC

▲ Boeing 720, C-FETB (c/n 18024), was operated by Pratt & Whitney Canada between 1988 and 2010. It carried out over 2,000 engine flight test missions during its career.



■ Two Flight Test Instrumentation Technicians stations were located at the sideways-facing mid-cabin consoles. This is where the critical data generated by the test engine is recorded.

typical engine flight test mission would involve a crew of seven people. The two pilots and one Flight Engineer in the cockpit maintained a stable platform for the two Flight Test Engineers (FTEs) in the cabin to carry out the testing. As the power was increased on the test engine, the flight crew adjusted the 720's power levels to compensate.

The forward station in the cabin was used by the FTEs for testing turboprop engines, which were mounted on the aircraft's nose appendage. The second station from the front was for the FTEs

testing turbofans. Two Flight Test Instrumentation Technicians (FTI) were stationed at the sideways-facing mid-cabin consoles. They were responsible for collecting the very critical data generated by the test engine. In the very back of the cabin, a large bank of batteries was used as a back-up to maintain the valuable data collected on the missions. The entire cabin was filled with consoles and electronics racks, with very little open space.

Externally the aircraft is certainly not a conventional-looking airliner. The

unusual extended nose allowed for the installation of turboprop engines for testing, thus the appropriate nickname *Pinocchio*. Displaced from the nose to above the cockpit is a small weather radome. A mounting on the forward starboard fuselage was used to test small turbojet engines, and was faired over when not in use. The starboard inboard (no.3) engine could be removed and replaced with a test article, usually large turbofans. The 720 was shorter and faster than the 707 and had wing root gloves that contributed to the >>

■ The forward test station was used for testing turboprop engines including the PW100 and PW150 families. Much of the instrumentation has been removed from the 720 and transferred to P&WC's new 747SP engine test-bed aircraft.







increase in speed. These were replaced with a more heat-resistant type of bare metal to protect the starboard wing from the exhaust produced by the nose and side-mounted test engines.

Although the 720 was not a type that was actually operated by the Canadian Air Force (CAF), it is a member of the 707 family, which was designated the CC-137 in CAF service. Five were flown by 437 'Husky' Squadron at CFB Trenton from 1970 until 1997 and all could be configured for passenger or cargo or combinations. Two could also be adapted as air-to-air refuellers.

P&WC and the Canada Aviation and Space Museum (CASM) in Ottawa came

to an agreement that the 720 could go on long-term loan to the NAFMC, in Trenton, Ontario. Accepting the airframe on behalf of CASM, Director General Stephen Quick said: "We pride ourselves in charting not only Canada's rich aviation and space heritage but also the celebration of important milestones in the history and technology of flight. Pratt & Whitney Canada has shown great foresight in donating this important aircraft to the national collection."

Marc Kirner, Director Flight Operations of P&WC said: "We are thrilled to have this historical part of our Flight Test Operation displayed and preserved

**Above** - The well-worn cockpit of the aircraft bears witness to a long and productive life. Noteworthy is the differently coloured no.3 engine tab on the top of the main panel. This is the engine that is replaced with a test powerplant.

**Below** - Why the P&WC Boeing 720 is nicknamed *Pinocchio* is quite apparent as the extended nose allowed for turboprop test engines to be mounted while the fairing on the forward starboard fuselage could take small fanjets.

where all Canadians can witness and learn about this unique aircraft."

In its 25-year career with the company, *Pinocchio* carried out an average of 90 missions annually and accumulated over 2,000 flights. Its final mission was on September 30, 2010, testing a PT6A-68B turboprop engine. By the time of its last landing, the 720 had racked up a total of 61,800 flight hours and 29,533 cycles. *P/W*

Thanks to Captain Steve Dieter, 8 Wing Public Affairs, and Chris Colton, Executive Director and Barb Neri of the National Air Force Museum of Canada



# B.R.M. *Bombers*



[www.brmi-manufacture.com](http://www.brmi-manufacture.com)

+33(0)1 61 02 00 25



# BRISTOL - The 'Whis

**T**he Bristol Britannia was a four-engine passenger transport developed in response to a 1946 requirement by the British Overseas Airways Corporation (BOAC) for a 'medium-range Empire' transport aircraft for service on the routes to Britain's colonies in Africa and the Far East. The basic specification had originally been laid down in the wartime report of the Brabazon Committee into Britain's likely post-war airliner needs. The Committee's Type III requirement called for an aircraft capable of operating over 100 to 2,500 mile (160 to 4,000km)

at speeds of 200mph (320km/h). Several British aircraft manufacturers tendered for the job, including the Aeroplane Company, which produced a slightly larger Lockheed Constellation derivative.



On the occasion of the 60th anniversary of its first flight, **Flight International** looks at the type's development and service history as a first-line, and then a second-line, carrier and freighter.



# Whispering Giant'

Prototype G-ANCA with  
Pratt & Whitney engines. The aircraft  
unfortunately crashed at  
Downland near Bristol in  
1947.



AT THE TIME THE BRITANNIA WAS THE LARGEST AND FASTEST AIRCRAFT  
IN OPERATION, AS WELL AS THE QUIETEST, AND WAS NAMED BY BOAC  
'THE WHISPERING GIANT'.

anticipation of an eventual production  
order from BOAC.

In November 1948, BOAC agreed to  
order 25 production aircraft, configured  
to accommodate 42, 50 or 64 day

restrooms, 30 in sleeper berths  
and a total of 144,000 each. The first six

aircraft were to be Centaurus-powered,  
with the remainder by either Centaurus

or the more powerful Merlin. By 1950  
the Constellation was the most

popular aircraft for all 25 to be fitted  
with a Merlin engine. By

1951, the Constellation had  
become the most popular aircraft

in the world, with 1,000,000 passengers  
carried by the aircraft.

The Constellation was the first aircraft  
to be built with a pressurized cabin.

The aircraft was also the first to be  
built with a pressurized cargo hold.

The Constellation was the first aircraft  
to be built with a pressurized cabin.

The aircraft was also the first to be  
built with a pressurized cargo hold.

The Constellation was the first aircraft  
to be built with a pressurized cabin.

The aircraft was also the first to be  
built with a pressurized cargo hold.

The Constellation was the first aircraft  
to be built with a pressurized cabin.





**"BOAC AGREED  
TO ORDER 25  
PRODUCTION  
AIRCRAFT,  
CONFIGURED TO  
ACCOMMODATE  
EITHER 42, 50 OR 64  
DAY PASSENGERS –  
OR 38 IN SLEEPER  
BERTHS."**

that year's Society of British Aerospace Companies (SBAC) show.

The second prototype, G-ALRX, took to the air in December 1953, but during a later demonstration flight with senior executives of KLM Royal Dutch Airlines aboard, it suffered turbine failure which led to a major engine fire. The resulting emergency landing was made on the mud of the Severn Estuary with only the two port engines operating. Fortunately the mud extinguished the fire and no serious injuries were suffered by the 13 on board. Following more development flying, which included tropical trials at Johannesburg and

**Fig. 11** The cockpit of Series 312 G-AOVT (c/n 134270), which is now on static display at Duxford, UK.

**Fig. 12** The Royal Air Force operated the type on troop and cargo flights.

**Fig. 13** Initially delivered to the RAF as XM519, this Series 253, G-BDUR (c/n 13513) was sold to Airline Engineering and then used by Afrek, Aerocaribbean and Trans Air Congo.

Khartoum, the first two BOAC Series 102s were handed over to the airline at London Airport on December 30, 1955, immediately after the issue of their Certificates of Airworthiness. During 1956, six more were delivered to BOAC and the airline commenced a series of route familiarisation flights to South Africa. However, in March of that year, BOAC experienced its first case of engine flame-out during flight in icing cloud conditions over Uganda. Several further incidents occurred during April – all in tropical zones. The cause was eventually traced to the formation of dry ice crystals on the inner walls of the engine cowlings, the ice then breaking away and entering the engine compressor in sufficient quantities to impede the

#### INITIAL OPERATORS (DELIVERY ORDER)

BOAC	December 1955
EI Al	September 1957
Aeromaves de Mexico	November 1957
Canadian Pacific Air Lines	April 1958
Air Charter (UK)	September 1958
Ministry of Supply (Boscombe Down)	October 1958
British and Commonwealth Shipping Company (Hunting Clan)	December 1958
Compania Cubana de Aviacion	December 1958
Royal Air Force	June 1959
Transcontinental (Argentina)	December 1959
Ghana Airways	August 1960





Initially used by Air Charter and British United Airways as G-ANCE, this aircraft was eventually converted to a freighter and used by Iris carrier Aer Turas as EI-8AA (c/n 12921).

Tom Singfield - [www.flickr.com/photos/tom-singfield/10000000000/](#)



Spanish charter operator Air Spain's, EC-BFL (c/n 13233), was a common European visitor and is pictured arriving at Paris/Orly in February 1969.

Tom Singfield - [www.flickr.com/photos/tom-singfield/10000000000/](#)

airflow through it. By the end of 1956 the necessary modifications had been made and the problem eradicated, but valuable time had been lost in getting the aircraft into airline service.

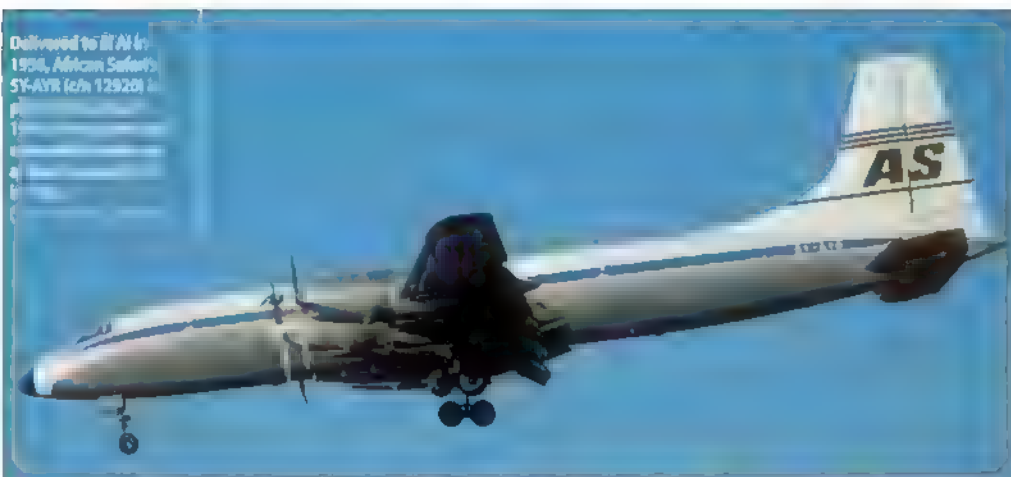
In the spring of 1956, G-ANBJ undertook a European sales tour, with demonstrations to Lufthansa at Hamburg and Cologne, and to Scandinavian Airlines System (SAS) at Stockholm and Copenhagen. This was followed by a much more ambitious North American sales tour by G-ANBJ, taking in 14 cities in the USA and Canada with demonstrations to a number of North American operators. Closer to home, efforts were made to sell the type to British European Airways (BEA) for use on European and domestic trunk routes, but the airline eventually ordered a fleet of Vickers Vandaguards instead.

The Britannia Series (Srs 102) entered airline service on February 1, 1957 when G-ANBJ operated the inaugural BOAC Britannia service to Johannesburg. >>



The last ten examples in the order were completed as the stretched Srs 312, with long-range fuel tanks for transatlantic routes. The carrier was eventually to operate 15 Srs 102s and 18 Srs 312s. A second production line was set up at the Short Brothers and Harland works at Belfast, as the announcement of the long-range Srs 300 had prompted interest from several overseas operators and led to orders from El Al Israel Airlines and Canadian Pacific Air Lines for use on transatlantic services. Another early customer was Aeronaves de Mexico, which commenced Mexico City-New York services with a single example on December 18, 1957. This solitary Britannia was to maintain a six-days-a-week service for a month without interruption until the airline's second machine was delivered.

Britannias were also ordered by the Ministry of Supply for use by RAF Transport Command, with 20 being delivered from both the Filton and



## The Britannia in BOAC Service

BOAC Britannia Srs 102 services commenced on February 1, 1957 with the inauguration of a three-times weekly schedule between London and Johannesburg via Rome, Khartoum and either Nairobi or Salisbury (now Harare), the total journey time being a scheduled 22hrs 50mins. For the next five years the Srs 102s served on the African and eastern route networks, replacing Canadian Argonauts and Lockheed Constellations. At the time the Britannia was the largest and fastest airliner in operation, as well as the quietest, and was dubbed by BOAC 'The Whispering Giant'.

The stretched Srs 312 entered service on

the London-New York route on December 19, 1957, although initially the new turboprop was used on just one service each week. These were the first transatlantic scheduled services by turboprop aircraft and also the first North Atlantic flights to be operated by British-built aircraft. However, the delays in introducing the type into service meant that its inaugural transatlantic services came just ten months ahead of the first jet services on the route (by BOAC's Comet 4s and Pan Am's American's Boeing 707s). It had originally been anticipated that it would have a three-year lead on the jet opposition.

In transatlantic service, the Srs 312s were

initially operated in an all-First Class configuration, with 26 'Slumberette' fully-reclining sleeper seats (for which a fare supplement was charged) and a further 26 conventional reclining seats. In November 1962, BOAC withdrew all its Srs 102s and offered them for sale, with the last service being operated from Hong Kong to London by G-ANOH on the 22nd. The Srs 312s were also later withdrawn, with the last BOAC service by the sub-type being flown by G-AOVL from Bermuda to New York on April 26, 1965. However, both variants were to go on to long and productive second lives with a variety of airlines in the UK and overseas.





About to leave London/Gatwick, Caledonian Airways Series 314, G-ATNZ (c/n 13396), was initially delivered to Canadian Pacific Air Lines in 1958. It was broken up at Biggin Hill, UK in 1972.

Tom Simpfendorfer



Britannia 313, HB-ITC (c/n 13431) of Swiss operator Globe Air. The aircraft was acquired from EI Al and eventually sold to African Cargo Airlines. It ended its days in the Fire School at London/Stansted Airport in the 1970s.

Tom Simpfendorfer

Belfast production lines. One of the last orders for new aircraft came from the Cuban national airline, Cubana, with two being ordered initially followed by a further two after an extensive sales tour of Spain, Portugal, Cuba and Latin America in June 1958. By then the aircraft was facing fierce competition for orders from the turboprop Lockheed Electra and the pure-jet de Havilland Comet 4 and Boeing 707, and it was decided not to build any more unless a substantial further order was received.

However, following its withdrawal from first-line service in the mid- >>



Left - Delivered to Compania Cubana de Avion in 1959, CU-T670 (c/n 13437) was withdrawn from use at Havana and broken up in 1997.

Tom Simpfendorfer

The Britannia entered service with BOAC on its Springbok route to South Africa.

## VARIANTS

- Mk 1** Prototype powered by Bristol Centaurus 662 - not built
- Mk 2** Two prototypes powered by either Bristol Centaurus 662 or Bristol Proteus 600 - none built
- 100** Powered by four Bristol Proteus 705s with room for 74 passengers
- 101** Prototypes, two initially powered by Proteus 625 and soon after re-engined with the Proteus 755
- 102** Production aircraft for BOAC - 15 built
- 200** All-cargo variant BOAC option for five was cancelled - none built
- 250** Similar to the 200, but mixed passenger and freight
- 252** Delivered to the RAF as the C2 Fitted with a heavy-duty floor in forward area of fuselage and cargo door - three built
- 253** Passenger/freight variant for the RAF, designated Britannia C1. Capacity for 115 troops or equivalent in cargo - 20 built
- 253F** Civilian freighter version of the 253
- 300** Passenger-only stretched version of the 200, capable of carrying up to 139 (originally 99) passengers
- 301** One Filton built company prototype
- 302** Belfast-built production, with ten ordered by BOAC (cancelled in favour of 305), seven were begun to this standard with two delivered to Aeronaes de Mexico
- 305** Five Belfast-built 302s modified for longer range but with limited take-off weight due to thinner fuselage skin and lighter landing gear
- 306** One former Series 305 leased to EI Al pending delivery of last Series 315
- 307** Two ex-BOAC delivered to Air Charter Limited September 1958 and March 1959
- 307F** Freight version of 307
- 308** Two former 305s ordered by Transcontinental SA of Argentina in a 104-passenger configuration
- 308F** Freight conversion of 308 for British Eagle
- 309** One former 305 (leased to Ghana Airways)
- 310** As 305 series, but with strengthened fuselage skin and undercarriage
- 311** One prototype originally known as a 300LR
- 312** Production aircraft for BOAC - 18 built
- 312F** Conversion of 312 to freighter (five converted)
- 313** Production aircraft for EI Al - four built
- 314** Production aircraft for Canadian Pacific Air Lines - six built
- 317** Production aircraft for Hunting-Clan Air Transport in 124 passenger troop configuration - two built
- 318** Production aircraft for Cubana de Avion - four built
- 319** Last production Britannia sold to Ghana Airways, modified from original Model 310/311
- 320** Variant for North American market - order for Trans World Airways not concluded, two built were completed as Series 324s
- 324** Two Series 320s built for Canadian Pacific Air Lines, later purchased by Cunard Eagle in 1961.

**"THE LAST TEN BOAC EXAMPLES WERE COMPLETED AS THE STRETCHED SRS 312, WITH LONG-RANGE FUEL TANKS FOR TRANSATLANTIC ROUTES."**



# Second-Hand Britannia Operators

Used Britannias found a ready market with airlines large and small throughout the world. Among the most significant UK operators was Britannia Airways (formerly known as Euravia), which purchased ex-BOAC Srs 102s to replace its ageing fleet of Constellations on inclusive tour (IT) flights, and operated its first Britannia service on December 6, 1964 from Luton to Tenerife. The airline was eventually to operate a fleet of eight, with the seating configuration increased to accommodate 117 passengers. They flew on holiday charters to the Mediterranean and North Africa as well as on troopng flights to Germany, and even ventured across the Atlantic. They were finally replaced by Boeing 737s, Britannia Airways operating the last service by its namesake from Luton to Genoa and back on December 29, 1970. British Eagle International Airlines acquired its first Britannia as Eagle Airways on April 5, 1960 when Srs 318, G-APYY was delivered on a seven-year lease from Cubana. The aircraft went into service the next day on a troopng flight to Christmas Island in the Pacific. The airline later became Cunard-Eagle Airways and was renamed British Eagle International Airlines on August 9, 1963 when founder Harold Bamberg bought out the Cunard shareholding. On November 3, 1963, Srs 312, G-AOVT inaugurated Heathrow-Glasgow services in direct competition with BEA. On the following day, London-Edinburgh services also commenced, and eventually British Eagle went on to operate 17 Srs 300s on scheduled UK domestic services, Ministry of Defence freight runs to the

Woomera rocket range in Australia, IT charters to Palma and Rimini, troopng flights to Singapore and Hong Kong and on transatlantic group charters. However, the carrier ceased operating in November 1968, with the airline's last commercial movement being the arrival into Heathrow of Srs 312, G-AOVT at the end of a multi-stop flight from Paramaribo in Suriname on November 7. (For a full history of British Eagle, see the latest *Airliner Classics*, which is available from mid-July.) British United Airways (BUA) was formed on July 1, 1960 by the merger of the Airwork Group of Companies with Hunting-Clan Air Transport and its various subsidiaries. The new airline inherited two Srs 307s from Air Charter Ltd and two Srs 317s from Hunting-Clan. All four were initially put to work on troopng flights from Stansted to the Far East, Cyprus, Malta and West Germany. From 1961 onwards they were also used on scheduled services from Gatwick to East Africa, the Africargo scheduled cargo service to Africa and IT flights. The arrival of VC-10s and British Aircraft Corporation (BAC) One-Elevens rendered the Britannias surplus to requirements and the final BUA service was operated by G-ANCE on January 21/22, 1969. Other UK operators of the type included BKS Air Transport, Caledonian Airways, Donaldson International Airways, International Air Services, Invicta International Airlines, Lloyd International Airways, Monarch Airlines, Redcoat Air Cargo and Transglobe Airways – while around 18 overseas operators also used second-hand examples.

Britannia Airways eventually operated a fleet of eight of the type, with the seating configuration increased to accommodate 117 passengers. (Bob O'Brien Collection)



1960s by BOAC, the aircraft acquired a second lease of life being used by the growing number of charter carriers that were starting up in the UK. This lasted a further ten or so years before many suffered the scrapman's axe. However, a handful were converted to freighters and soldiered on – predominantly in Africa – into the 1980s.

The last Britannia to fly was a former RAF Srs 253, EL-WXA (c/n 13508). It had ended its days in Zaire with Trans Air Cargo and was then ferried in stages from Lanseria, near Johannesburg in South Africa, to Kemble, UK, arriving from Palma on October 14, 1997. It is now preserved at the airfield under the care of the Britannia Aircraft Preservation Trust, repainted in its original RAF livery of XM496. **PI/P**

The announcement of the long-range Srs 300 prompted interest from several overseas operators and led to an order from El Al Israel Airlines.

(IT: www.britannia-aircraft.co.uk)

The aircraft on display at RAF Cosford, G-AOVT/XM497 (c/n 13237) has now been painted from BOAC colours back into RAF markings.

## PRESERVED/DERELICT AIRFRAMES

Srs 308	G-ANCF	12922	Being restored outside the old terminal at Liverpool Airport.
Srs 312	G-AOVT/XM497	13237	Royal Air Force Museum, Cosford, UK. Painted in RAF markings.
Srs 312F	G-AOVS	13430	Used as fire trainer at London/Luton Airport, UK.
Srs 312	G-AOVI	13427	On display at Duxford, UK in the colours of its last operator, Monarch Airlines.
Srs 253F	XM496	13508	Britannia Preservation Society, Kemble, UK.



**Seldec Publishing**  
**27 Chichester Avenue**  
**Kidderminster**  
**Worcestershire**  
**DY11 5JA**

www.seldec.com

email seldec@aol.com

**SELDEC**  
**PUBLISHING**  
Est. 1988

## NEW PUBLICATIONS

### GUIDE TO SPANISH AIRPORT FREQUENCIES

Guía de Frecuencias Aeroportuarias Españolas

2012

Includes VHF radio frequencies for ALL Airports in the Spain, Canary & Balearic Islands & Possessions

96 pages A5 Perfect Bound

Colour cover

£10.95 P&P £2.00



### THE UK & IRELAND AIR BAND FREQUENCY GUIDE

2012

16<sup>th</sup> Edition

UK Airfields & Airports

Includes VHF radio frequencies Ireland & More

146 pages A5 spiral bound

Colour cover

£10.95 P&P £2.00



**"THE DIRECTORY OF AIRLINE CODES AND CALLSIGNS"**  
 OVER 650 changes since last edition!  
 The book lists around 2250 airline companies including scheduled, charter & cargo, by name, call sign, two and three letter codes and country of origin in four separate sections. The 216 pages are A5 format.

Price £14.95 P&P £2.00 UK.

**UK. NORTHERN IRELAND & IRELAND FLIGHT ROUTES 2012**  
 Lists thousands of flights which originate in UK/NI/ROI airports. Lists airport of origin & destination with aircraft type, days of operation. This is not a timetable although guide times are shown  
 200 pages A5 Format

£16.95 P&P £2.00



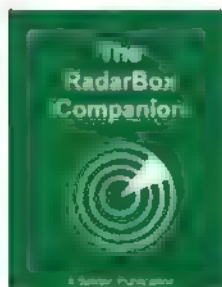
The HF Marine BAND frequency List is our latest publication for Short-Wave Radio listeners with a general or particular interest in Marine Radio, listed are the frequencies of civil, Military & Government shipping on the HF Bands covering the spectrum from 1.5KHz to 30MHz (with an additional section on MF CW Shipping Frequencies, YES the MF Marine band is still in use!), 225 Pages "Perfect Bound" Price £16.95 Post & Packing £2.00



### "HF AIRBAND FREQUENCY LIST"

Includes sections on MWARA, RDARA & LDOC Frequencies.. Includes HFOL Frequencies Thousands of other HF Airband Radio frequencies & more. 225 pages A5 Portrait Format

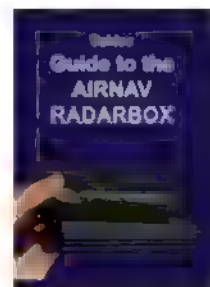
Perfect bound  
 Price £16.95 Post & Packing £2.00



Designed to enhance the users enjoyment whilst using the AirNav RadarBox, this publication composes two main sections

Section 1 list of around 3100 four letter ICAO airport codes with Index. Section 2 List of three letter IATA airline codes, together with 2234 two letter codes, radio call sign and country of origin. A5 portrait 163 pages, colour covers, Price £12.95 Post & Packing £2.00

This publication has been compiled by a real life AIRNAV RadarBox version 3 & 3D. Includes sections on getting started, using RadarBox, explanation of menus, windows and toolbars including RadarBox interface, section for advanced users, tracking military aircraft. Questions are answered in the trouble shooting section. A5 portrait 115 pages, covers, Price £12.95 Post & Packing £2.00 UK Only



**More titles on our web site [www.seldec.com](http://www.seldec.com)**

When purchasing more than one book maximum postage £4.00. EU & Overseas customers please confirm postage costs before purchase

**You may order by Telephone 01562 746620**

Or by post to address at top, email [Seldec@aol.com](mailto:Seldec@aol.com) or through website

**[www.seldec.com](http://www.seldec.com)**

Payment by Visa & Mastercard Credit Cards, Cheque or PayPal.





# THE CENTRE SPREAD

AUGUST 2012

One of the main  
hubs at the  
desert 'honeycomb' of  
Victorville, California,  
there are (at least) ten  
different types  
(plus variants) of  
airliners in the image







# Airliner World

Your favourite magazine now on the iPhone, iPad and Android.

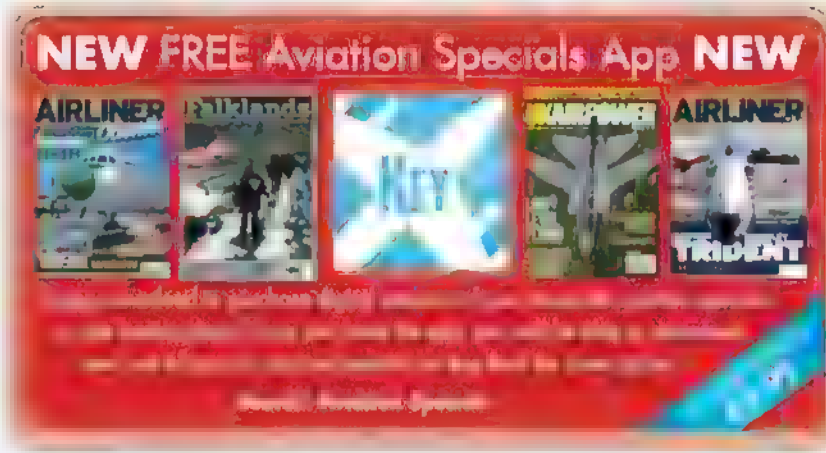
**Download now.**

Available from iTunes, Google Play and the App Store.



Search: Airliner World

**Also available for download**



How it Works.

Don't forget

ALSO AVAILABLE FROM POCKET MAGS



**pocketmags.com**

**ANDROID  
AVAILABLE  
NOW!**

# Zvartnots

## Armenia's International Gateway

**Craig West** examines the development of Yerevan's Zvartnots International Airport from a former Soviet hub to one of the most modern facilities in the world.

**T**hough it is one of the oldest continuously inhabited cities in the world, few people would be able to locate the Armenian capital of Yerevan on a map. In fact, despite its relative obscurity, the former Soviet state of Armenia was until recently one of the fastest expanding economies of the Commonwealth of Independent States (CIS), while its primary international gateway is now one of the world's most modern airports.

Yerevan sits on the Hrazdan River at the western edge of the Ararat Plain. The city, which can trace its origin to the construction of a fortress at nearby Erebuni in 782BC, is the administrative, cultural and industrial centre of Armenia, and is home to over 1.1 million people. The southern Caucasus nation stands at the crossroads of Europe and Asia, bordering Azerbaijan to the east, Georgia to the north, and Iran and Turkey to the south and west respectively. However, relations with >>

The new facility at Zvartnots stands adjacent to the distinctive, Soviet era circular terminal and Air Traffic Control tower





its neighbours have, at times, been best described as strained, meaning that air transport has played a pivotal role in the economic development of this land-locked nation – but despite its relative importance, commercial flights operate to just two airports: Zvartnots, located 7.5 miles (12km) west of the capital, and Sharak, which serves the north-western city of Gyumri.

### Soviet Rule

Armenia's first flirtation with aviation came in December 1920 when a group of local pilots established an aerial reconnaissance detachment. However, the venture lasted barely two years; the country was annexed into the Soviet Union in 1922 and the fledgling unit was merged with others in neighbouring Azerbaijan and Georgia. Using the name Underavia, this group became the basis for the creation of civilian aviation in the Caucasian republics.

Regular services between Yerevan and the Georgian city of Tbilisi were introduced in 1933, marking the first real attempt at commercial operations. However, it was the inevitable arrival of Russian carrier Aeroflot years later which

led to a significantly expanded network with the airline eventually linking the capital's small airport at Erebuni to most of the major cities across the USSR. Traffic levels rose markedly, and in 1961 a decision was made to build an entirely new airport at Zvartnots, 3 miles (5km) west of the original airport.

The collapse of the Soviet Union in 1990 brought significant changes for Armenia which, like the other former republics including Georgia and Azerbaijan, re-established its autonomy, and on August 23, 1991 it became the first outside the Baltic states to declare its independence.

A new state-controlled entity, Armenian Airlines, assumed control of the operations of the former local Aeroflot directorate, inheriting its ageing fleet of Antonov, Ilyushin, Tupolev and Yakovlev models, and launched flights to neighbouring CIS states. This was followed by the introduction of private operator Armavia in 2002 – which became the country's national carrier in April of the following year, after the bankruptcy of Armenian Airlines.

### A Latin Influence

In December 2001, the Armenian Government signed a concession agreement passing the management of Zvartnots into private hands. The 30-year contract with the Argentinean firm Corporacion Amenca – owned by Eduardo Eurnekian, an ethnic Armenian entrepreneur – entered



Arrivals and departures at Zvartnots are split across two floors.

The new terminal features 46 check-in desks, effectively doubling the airport's capacity. The grey fabric baffles, developed by British firm Archilen Landrell, are clearly visible on the ceiling.

Armavia was once the largest airline to serve Yerevan, though its recent decline has led to other operators increasing their presence in the city. Here, the carrier's first Sukhoi Superjet 100, EK 95015 (c/n 95007), sits outside the old terminal building.

force on June 9, 2002 when the full subsidiary, Armenia International Airports (AIA), was established.

With the country's new-found freedom came the need to upgrade its transport hubs. For the first time the airport could host international services, but significant preparation was required



before this was possible. Under the terms of the concession, AIA had agreed to construct a new terminal building but realised that an interim solution was necessary and invested heavily in the existing facility.

The architecture of the original terminal, which was opened in 1979, was quintessentially Soviet. Made from heavy concrete, the circular terminal and distinctive Air Traffic Control tower was reportedly inspired by Paris/Charles de Gaulle's Terminal 1 and would not look out of place in a science fiction film. The building was designed to cope only with domestic passengers, which it did very well, and was considered to be one of the best facilities in the former Soviet Union. However, Zvartnots was simply a gateway within the USSR with most flights from Yerevan going to the central hub at Moscow. The circular design left little scope for expansion, leaving facilities such as customs, security and new check-in desks to be squeezed in under the \$90 million Phase 1 investment programme. Other improvements included re-laying the airport's single, 12,629ft (3,849m) runway and the installation of a new Category 3 lighting system.

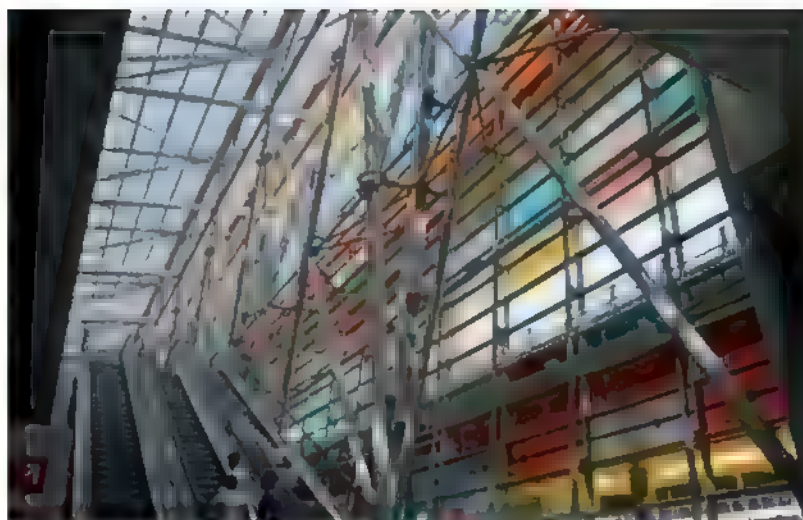
Work started on Phase 2 of the development in 2004 when AIA began construction of the new terminal building. The first element, the arrivals hall, was completed in September 2006 with the departures area following in June 2007 – however, passengers

#### AIRLINES

Aeroflot  
Aerosvit Airlines  
Air Armenia  
airBaltic  
Air Cargo Germany  
Air France  
Air Italy  
Armavia  
Atlasjet  
Austrian Airlines  
Beavia  
British Midland  
International bmi  
Bulgarian Air Charter  
Coyne Airways  
Czech Airlines  
Dniproavia  
Donavia  
Donbass Aero  
flydubai  
Iran Aseman Airlines  
Kuban Airlines  
LOT Polish Airlines  
Meridiana fly  
NordStar Airlines  
Povet Airlines  
Rossiya  
Rusline  
S7 Airlines  
Saravia  
Scot Air  
Syrian Air  
Tatarstan Airlines  
Transaero Airlines  
Ural Airlines  
UTA Aviation  
Yamal Airlines

Top right - The new terminal makes extensive use of modern design features including a partially glazed roof and this elaborate steelwork.

Left - This mural, produced by Soviet Armenian painter Minas Avetisyan, was originally displayed in the second city of Gyumri before being transported whole to Zvartnots.



continued to check-in using the original, but refurbished, Soviet-era terminal before proceeding through a specially-built walkway into the new facility.

The opening of the halls ushered Zvartnots into a new era. Designed to handle two million passengers per year, the 206,674sq ft (19,200m<sup>2</sup>) departure concourse is twice the size of its predecessor and has six gates, including five with airbridges and one for remotely-parked aircraft. It includes a business lounge which stretches the entire length of the building and has an offering on par with its Western rivals. The new facility has a spacious and modern ambience through the heavy use of glass and natural materials while passengers can take advantage of a selection of retail outlets and Wi-Fi internet, in all a significant improvement over the original terminal.

#### Phase 3

The final element of AIA's expansion plan was launched in spring 2008. The \$160 million Phase 3 project covered the construction of the public zone and check-in area, effectively completing the new terminal building. Financed by the European Bank for Reconstruction and Development, the Asian Development Bank and German investment corporation DEG, the

>>

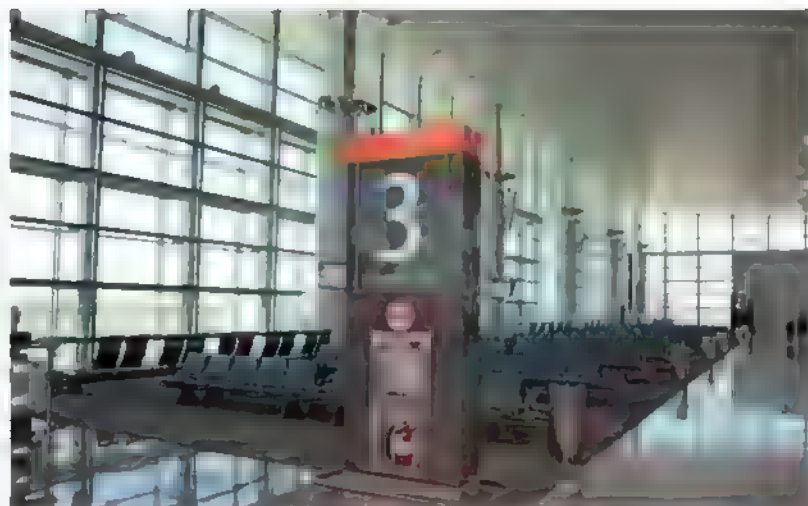


370,000sq ft (34,000m<sup>2</sup>) extension was fully opened to the public in November 2011, though an official ceremony was held on September 16 as a fitting tribute to Armenia's 20th anniversary of independence celebrations.

Zvartnots International Airport's Deputy General Manager, Andranik Shkhyan, explained that the new facility underwent a phased opening. "The terminal was inaugurated in September 2011, but for the first month it was used to handle only arrivals – departures were added later. The phased opening allowed us to deal with any problems as they arose, while doing this at the start of the winter season meant that the volume of flights was far lower."

Mr Shkhyan added that the building incorporates strong European influences and has a Westernised feel. "It offers a simplified and more efficient layout [compared to the old terminal] but also gives provision for expansion. It is designed to meet the anticipated increase in passenger traffic."

The spacious new departures hall can handle up to 2 million passengers per year and offers a selection of retail outlets along with Wi-Fi Internet



The eye-catching glass façade of the new terminal is accented by coloured panels and allows natural light to flow throughout the building.

handle up to 3.5 million passengers per year. The ultra-modern check-in area is finished in white and light turquoise tones, highlighted by bright orange counters and finished with traditional motifs while the 46 desks effectively double the airport's capacity. Most eye-catching is the glass and steel façade – accented by coloured panels – which allows natural light to flow throughout the terminal.

Andranik Shkhyan is understandably proud of the new look airport and is keen to emphasise the importance of the investment. "We are now well placed to compete with regional rivals such as Tbilisi in Georgia. The terminal

incorporates the latest technology in all possible areas including climate control, security and baggage handling."

In addition to meeting international standards, many of the design features were dictated by local geography. Armenia is in an area of relatively high seismic activity and the new facility was built with this in mind. Lead rubber isolators were installed in the building's basement, effectively acting as shock absorbers in the event of an earthquake. The original plan also called for the

**"WE ARE NOW WELL PLACED TO COMPETE WITH REGIONAL RIVALS SUCH AS TBILISI IN GEORGIA."**

Zvartnots Airport Deputy General Manager Andranik Shkhyan

### A New Era

The introduction of Zvartnot's new terminal marked the end of an era for passengers travelling to Yerevan. The now closed Soviet-era building stands adjacent as a prominent symbol of Armenia's past, and all flights and operations have relocated to the new 559,742sq ft (52,000m<sup>2</sup>) facility. The terminal was designed in-house to meet IATA's Level 2 standards and can



YEREVAN/ZVARTNOTS	
ICAO Code:	UDYZ
IATA Code:	EVN
Location:	N40° 08.50', E44° 23.45'
Elevation:	2,838ft (865m)
Runway:	09/27 12,629ft (3,849m)
Website:	www.aia-zvartnots.am



Perez Monsalvo explaining that one of the biggest issues was the sourcing of suitable equipment and materials. "Almost all of the building material had to be imported. Armenia, being a landlocked country, created a significant logistical challenge and we faced many problems getting the construction materials delivered on time. On several occasions, airport agents had to fly to the bordering countries to solve transportation problems, while the long lead-in time was particularly troublesome where items were forgotten. It was also very complicated trying to communicate specifications, requirements and deadlines with contractors, though these difficulties were soon addressed." >>

The Government of Armenia used this Tupolev Tu-134A-3, EK-65072 (c/n 49972), as the president's official aircraft until 2007 when it was replaced by an Airbus A319CJ.

This anonymous Ilyushin Il-76TD, EY680 (c/n 0073479367), is operated by Rus Aviation of Tajikistan and was one of several Soviet-build types either stored or undergoing maintenance at Yerevan.

entire roof to be glazed, but with temperatures in the southern Caucasus region reaching over 40°C (105°F) during the summer, it was necessary for designers to compromise between aesthetics and practicality. In the final design, 40% of the roof area is glazed while a glass louvre system reflects direct sunlight, reducing heat but

allowing in natural light. Construction of the new facility was not without its difficulties, Corporation America's Project Manager Lucas







Despite its recent decline, Armavia has added several second-hand aircraft to its fleet, including Boeing 737-55S, EK 73772 (c/n 28472), which was formerly OK-DGL with CSA.

Construction work at Zvartnots has not been limited to just the terminal, with several other developments having recently been completed. Significantly, the Phase 3 development included a 240,000sq ft (22,000m<sup>2</sup>) multi-storey car park, the first of its kind in the country. The government-owned and operated Air Traffic Control tower was built three years ago while a new 'Presidential' facility, for use by the Armenian head of

state and other high-ranking officials, was opened at the end of May.

Keen to strengthen its position in the region, the airport has also included a standalone VIP lounge within the new terminal and has added a cold store to its 78,000sq ft (10,000m<sup>2</sup>) air cargo facility. Interestingly, the latter is currently used to house large quantities of Armenian wine, an unusual side project for Corporacion America.

### New Markets

Yerevan's international airport has experienced remarkable growth over the past decade with passenger figures having doubled to over 1.6 million since AIA assumed control of the concession. For the most part, locally-based national airline Armavia was the largest operator, a reflection of the monopoly it held on services from the city. However, the carrier's position has slowly eroded since it was sold to private Armenian investors in 2005 and it has endured a particularly difficult 12 months. As Armavia withdrew routes from the capital, other carriers stepped in to fill the void with CSA, Air France and LOT having all increased their presence in the country. Meanwhile, other airlines have upgraded the equipment used on flights to Yerevan – Austrian Airlines, for example, recently swapped its Bombardier CRJ for the larger Airbus A319, a move which has been welcomed by the airport.

Yerevan's location on the old Silk Road route between Asia and Europe makes Zvartnots an excellent option as a small transit point – a market that is being actively pursued. AIA Director Juan Pablo Gechidjian said the airport is pushing hard to attract transit passengers. "Yerevan is very well positioned between Europe and Asia as an optimum transit hub and our new terminal is equipped to handle this." However, a real sticking point is the contract awarded to the Armavia by the Armenian Government, granting the carrier exclusive traffic rights from Yerevan. "The success of the airport is very much dependent on Armavia," Andranik Shkhyan reflected. "They have withdrawn several services recently and in some cases, such as [flights to] Germany, no-one else has stepped in." He added that the prospects for Zvartnots will look significantly better once this deal expires in March 2013, particularly if the rumoured open-skies arrangements come to fruition.

## A Flexible Friend

One of the most unusual elements of the new terminal at Zvartnots is the distinctive, wave-like fabric canopy above the main entrance. Supplied by British firm Architen Landrell, the 64,500sq ft (6,000m<sup>2</sup>) weatherproof, low-maintenance canopy is made from PTFE-coated glass fabric and provides shelter from the extreme climate changes Armenia is subject to. Lance Rowell, Architen Landrell's CEO, remarked: "The use of fabrics is a very bold design statement. It has a lifespan of up to 40 years, meaning that it fits in well with the short to medium-term plans of airport developers."

AIA also employed fabrics inside the building, with the British firm designing, manufacturing and installing light-diffusing baffles. Rowell explained that the task was made more difficult because the internal roof cladding and steelwork, which the baffles were intended to conceal, were already in place. The company developed grey, PVC-coated lightweight fabric panels to cover the 21,987sq ft (2,042m<sup>2</sup>) ceiling, allowing light to permeate through. They are also designed to act as a shield in the event of a major shock such as an explosion or earthquake. (Photo Key - Craig West)

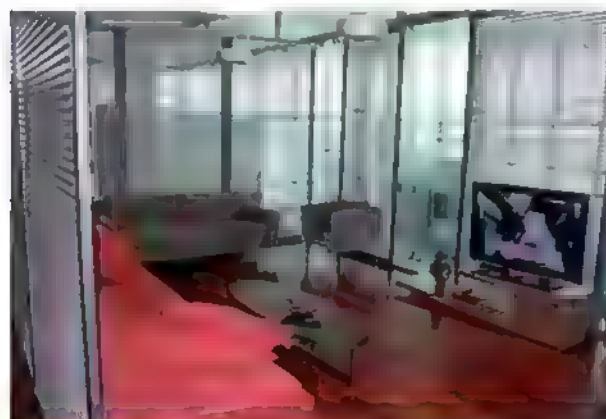


Unsurprisingly, the largest market for Yerevan is Moscow, with flights operated by Aeroflot, Armavia, Transaero and S7; the city also has frequent connections to others across the CIS. However, with Europe's major cities between 3.5 and 5 hours flying time away, the Armenian capital has proven to be too far for the continent's low-cost carriers – though interest is strong from Gulf-based carriers, with flydubai operating to Sharjah in the UAE and negotiations reportedly at an advanced stage with other airlines from the region.

Currently only British Midland International – bmi connects Armenia to the UK, with a daily service which continues on to Tehran. Mr Shkhyan commented that, despite several regional alternatives offering cheaper handling charges and fuel, the airline has selected Armenia because it is considered a key



Airbus A319-132(CJ), EK-RA01 (c/n 913), is based at Zvartnots and is operated by the Government of Armenia. A new 'Presidential facility, for use by the head of state, was opened at the end of May



market. The importance of the service is reflected by confirmation that British Airways, which recently acquired bmi, has committed to operating the flight for at least the next two to three years.

One reason that Yerevan has been able to attract European carriers is that it is open 24 hours a day. Unlike many of its Western counterparts, Zvartnots has no curfew meaning that many airlines operate here during the night; a wave of departures during the very early hours is commonplace, making it one of the airport's busiest periods.

Zvartnots' continued growth has encouraged AIA, which is now considering introducing further links to destinations such as Lebanon and Syria. The focus continues to be on attracting medium and long-haul traffic to Yerevan with China being targeted as a potential market, along with the large Armenian communities in Argentina and the US.

### Optimistic Outlook

Since gaining independence in 1991, Armenia has made huge strides to establish itself as both a hub and a tourist destination in its own right. For AIA, the focus remains very much on the development of Zvartnots – the local authorities have recently signed a letter of intent, outlining plans to connect the airport to the country's rail network, and to develop a free trade zone. The new facility's capacity of 3.5 million passengers per year is expected to be sufficient until the end of AIA's 30-year concession, though the airport building can be expanded to both the east and west under the Phase 4 project. The terminal, with its strong local and European design influences, has been well received by both the general public and passengers alike, and has turned the airport into a genuine competitor to its regional rivals. **EW**

**YEREVAN IS VERY WELL POSITIONED BETWEEN EUROPE AND ASIA AS AN OPTIMUM TRANSIT HUB AND OUR NEW TERMINAL IS EQUIPPED TO HANDLE THIS**

The Business lounge at Zvartnots stretches the entire length of the new terminal and is comparable with those found in the major airports of Western Europe.

The new terminal building incorporates five airbridges, while a sixth gate can be used for remotely-parked aircraft.





CHINA

Sammyon



**A**n organized all-patriot enthusiasts' tour to North Korea? Yes please, said the author who set out full of

However, the chance to fly on an Antonov An-124 (Yankee 124) is a big one. It's a rare opportunity to see a

The party departed for the... However, the chance to fly on an Antonov An-124 (Yankee 124) is a big one. It's a rare opportunity to see a

These would be the first of a



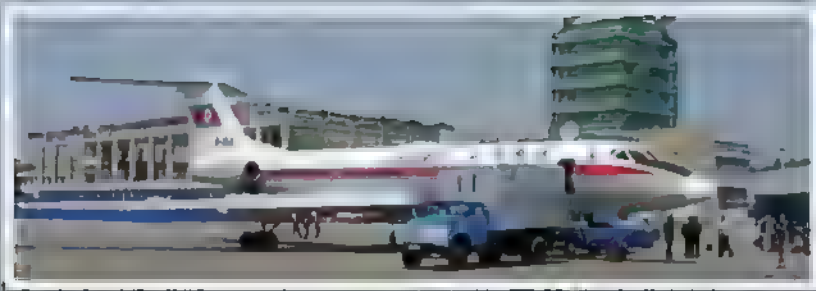
the arrival at the gate is totally relaxed and photography of the Il-62 is allowed. Air Koryo only operates a few international services including Beijing, Shanghai, Yantai, Seoul, Kuala Lumpur and Bangkok.

### The Tour Commences

The following morning, the tour... the arrival at the gate is totally relaxed and photography of the Il-62 is allowed. Air Koryo only operates a few international services including Beijing, Shanghai, Yantai, Seoul, Kuala Lumpur and Bangkok.

Back in the morning, the tour... the arrival at the gate is totally relaxed and photography of the Il-62 is allowed. Air Koryo only operates a few international services including Beijing, Shanghai, Yantai, Seoul, Kuala Lumpur and Bangkok.

# A Glimpse Behind Closed Doors



There are now very few countries that are 'taboo' for aviation enthusiasts. With a new leader in place, it now seems that even North Korea is opening its boundaries. **Steve Kinder** has found out.



# Air Koryo - A Brief History

North Korean carrier Air Koryo was initially established under the name Sokao in 1950 as a joint Soviet-North Korean concern to connect the country with Moscow. Services were suspended during the Korean War, but resumed again in 1953. The current airline was established in 1954 and started flying on September 21, 1955 under the control of the Civil Aviation Administration of Korea (CAAK). It began operations with Lisunov Li-2s, An-2s and Il-12s. More modern Il-14s and Il-18 turboprops were added to the fleet in the 1960s. Jet operations commenced in 1975 when the first Tu-154B was delivered for services from Pyongyang to Prague, East Berlin and Moscow. However, because the Tu-154 did not have sufficient range, the aircraft had to land at Irkutsk and Novosibirsk to refuel. Smaller Tu-134s and An-24s were delivered to start domestic services. The Tu-154 fleet was increased at the start of the 1980s, and the first Il-62 was delivered in 1982 - two of these aircraft being used in a VIP configuration - allowing CAAK to offer direct non-stop services to

Moscow for the first time. During this period, Sofia and Belgrade were also destinations; however, under current European aviation regulations, because of maintenance concerns Air Koryo is forbidden to land at any European airport. The end of the 'Cold War' and the collapse of Communism in Europe saw a vast reduction in the number of international services offered. CAAK became Air Koryo in 1993 and immediately ordered three Il-76 cargo aircraft to carry any extra freight to its destinations in China and Russia. The carrier recently purchased two new Tu-204s to replace the ageing international fleet and has also started modernising its fleet interiors. With the new type, Air Koryo will be able to fly to Europe. In September 2009, it opted to order a further example of the Tu-204-300 and a single Tu-204-100. The carrier is also in talks over possible orders for the Sukhoi Superjet 100 to replace the Tu-134s and An-24s. Flights to Dalian, China, have been added to the schedule with a twice-weekly Tu-134 service from Pyongyang, and direct links from



Pyongyang to Shanghai/Pudong were inaugurated with a fortnightly service from earlier this year. On March 30, 2010, the carrier had two of the Tu-204s lifted from the European blacklist allowing the airline to recommence flights to Western Europe, but the rest of the fleet is still banned. Services

to Kuala Lumpur and Kuwait City were started in 2011, both being operated weekly by the Tu-204s. All international flights should be operated by the Tu-204s but this is not always the case, due to occasional aircraft unserviceabilities and other aircraft in the fleet are substituted when able.

The return flight to Beijing was onboard Tupolev Tu-154B-2, PS61

The party then boards three buses - one is nicknamed 'Cuthbert' as it was so old and seemed to be held together by sticky tape. The buses then attempt a journey to the highest mountain in North Korea, Mount Paektu, but the road is closed due to snow. Sadly 'Cuthbert' finally breaks down - the radiator overheats - and so the passengers are transferred to another in the fleet. The Paektusan Secret Camp is the next port of call. This is where the revolution to rid the country of 40 years of Japanese rule started in 1937. However, it starts to pour down with rain and the group beats a hasty retreat to the buses.

The Be Gae Bong Hotel is the location for the overnight stop. There is no water or electricity available, but this is no real hardship. The special offer of



There was even time for a question and answer session with the pilots in the cockpit of an Ilyushin Il-18.

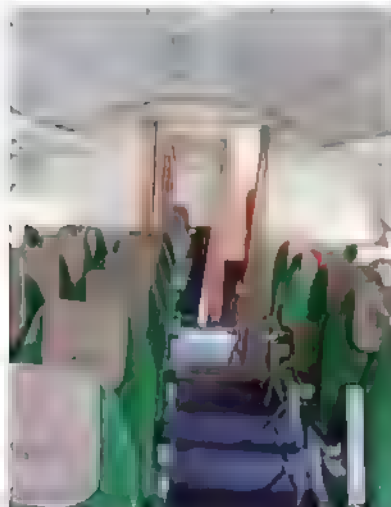
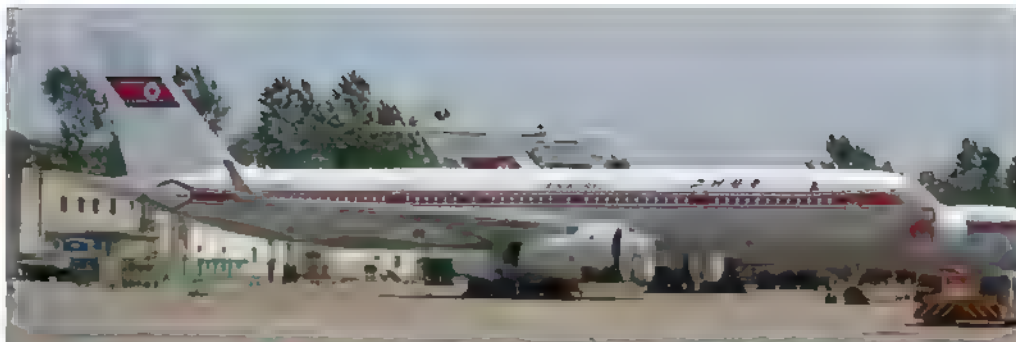
One day included a flight on a chartered Ilyushin Il-18D, P 833, to Samjiyon in the north of the country.



a potato barbecue is accepted but this proves to be nothing more than a raging fire with potatoes – they did not taste that bad with salt!

The following morning starts off with more 'propaganda' with a visit to another of Kim Jong-il's sites – a view of a fantastic river with waterfalls and another tribute to the 'Great Leader'.

Back at Samjiyon Airport, there is more than sufficient time to wander around the Il-18 while it is on the ground.



Top - The only 'modern' aircraft in the Air Koryo fleet are two Tupolev Tu-204s.

Left - The interior of the classic Ilyushin Il-18.

Above - The fridge/

freezer on the Ilyushin Il-18 looks like it came from 1960s USA.

Flight time back to Pyongyang is 1 hour and 15 minutes at a height of 18,000ft. On disembarkation the group is driven straight to an Il-14 '535' and another photo shoot. The aircraft, which used to belong to the North Korean Air Force, has more recently been a training airframe for Air Koryo. However, in the past few months, it has been repainted to commemorate the succession of Kim Jong's son and looks immaculate. The chance is also taken to photograph two An-24s, a Tu-154B-2, two Il-76s and a modern Tu-204.

From the airport at Pyongyang, the group are taken to view the USS Pueblo – a 'spy ship' captured on January 23, 1968 which is held in great esteem by the North Koreans. Only one crew member lost his life during the capture and the other 82 were taken prisoner. They were released on December 23, 1968, after a letter of apology was received from the US Government.

The next day sees a visit to a war museum where there are several aircraft that flew for North Korea in the Korean War and, potentially even more impressive, a captured collection of armaments, aircraft and transports 'acquired' from the United States forces.

In the afternoon, a flight on An-24,

P-533, has been organised. It is just a one-hour round-trip flight, but enjoyed by all. Once again, the group is treated to full photographic access before boarding and after landing. The following day includes a trip on Tu-134, P-814, to Sandok. The airport serves the city of Hamhung and as it is partially operated by the military, photography of the 60-plus An-2s on the airfield is forbidden. The group is then taken to a beach-side hotel, the Kumsangsan Hotel – fine but once again with no water. No-one is allowed to leave. The gates at the front are closed to 'Westerners' and a stroll down the beach brings one into contact with armed guards!

The next morning includes a visit >>



Three Ilyushin Il-76s are used for freight services.

**"ON ARRIVAL, THE CREW JOINS THE GROUP FOR 'QUESTION TIME' - UNTHINKABLE A FEW YEARS AGO."**





# AIR KORYO FLEET

Type	Reg'n	c/n	Status
Antonov An 24	P-529		not confirmed delivered
	P-531		not confirmed delivered
	P-527	67302207	n/k
Antonov An-24B	P-528	67304705	n/k
	P-537	67302408	active
	P-532	47309707	active
Antonov An-24RV	P-533	47309708	active
	P-534	47309802	n/k
	P-835	188011205	active
Ilyushin Il-18D	P-836	185008204	Freighter stored wfu
	P-618	2546624	Government active
	P-880	2241758	transferred to Russian Air Force
Ilyushin Il-62M	P-881	3647853	active
	P-882	2850236	Government active
	P-885	3933913	active
Ilyushin Il-76	P-912	1003403104	active
	P-913	1003404126	active
	P-914	1003404146	active
Mil Mi-17	P-101		n/k
	P-102		n/k
	P-103		n/k
Tupolev Tu 134B	P-104		n/k
	108		Government active
	P-812		n/k
Tupolev Tu-134B 3	P-814	66368	active
	P-811	66215	active
	P-551	75A129	active
Tupolev Tu 154B	P-552	76A143	active
	P-553	77A191	n/k
	P-561	83A573	emergency trainer wfu
Tupolev Tu-204-100	P633	1450741964048	active
Tupolev Tu 204-300	P-632	1450742364012	active
Ilyushin Il-14	'535'		static display

to the local fertiliser factory, before returning to the airport and a Tu-134 flight back to Pyongyang. The last day sees a return of the mobile phones at the airport before boarding a Tu-154B-2, P-561, to Beijing. On landing, one can only guess that the pilot was lost as the aircraft taxis round and round for 20

There was even time for a crew 'shot' following the trip on the Antonov An-24.

'Star' aircraft of the trip was this repainted Ilyushin Il-14, '535'.



minutes – but as it passes a Shandong Airlines Boeing 737 twice, this would appear to be the norm in the smog!

The whole trip had been a great success, a fantastic way to travel considering the ever-increasing ranty of the aircraft types, and a great insight into the country of North Korea – nothing like what one imagined.

(All must have gone very well as Air Koryo has now confirmed that future

trips in 2012 will involve flying on an Il-76 and a Mil Mi-17 – and there are at least three trips confirmed.) **11/11**

Thanks to David of JUCE Travel Services of London and the four guides of the Korean International Tourist Company, plus all at Air Koryo for making things run so (relatively) smoothly.

**THE NEXT MORNING INCLUDES A VISIT TO THE LOCAL FERTILISER FACTORY, BEFORE RETURNING TO THE AIRPORT AND A TU-134 FLIGHT BACK TO PYONGYANG.**



# CELEBRATING THE HISTORY OF COMMERCIAL AVIATION



Brought to you by the industry-renowned team behind Airliner World, Airliner Classics 4 turns the clock back once again to bring you the aircraft, airlines, airports and personalities making headlines in the classic years of aviation over 100 high-quality pages.

Features include:

BRITISH EAGLE

BOEING 737 CLASSICS

look at the development of

FLYING IN CONCORDE

an account of supersonic services to the Middle and Far East during its 1970s heyday

BRANIFF INTERNATIONAL AIRWAYS

AND MUCH MORE!



Available from 11 June 2011 **WHSmith** and other leading bookshops

ALTERNATIVELY, ORDER DIRECT:



**Airliner Classics**  
The World's Most Popular Aviation Magazine



**Airliner Classics**  
The World's Most Popular Aviation Magazine



SUBSCRIBERS CALL FOR YOUR £1.00 DISCOUNT





Sam Chui has provided these images that show how busy New York's primary international gateway can be.

*'A View from Above'*

# JOHN F. KENNEDY INTERNATIONAL

Delta Air Lines is the main user of Terminal 2 on the left and an array of carriers at the International Air Terminal 1 on the right.



As with many airports, construction continues at the airport with an extension to a pier at Terminal 4.

Air China's arrival from Beijing, Boeing 747-400, B-2443 (c/n 25881), crosses over one of the main highways to and from the airport.



# AL AIRPORT



An Air India Boeing 777-300ER, VT-ALR (c/n 36316) taxis for departure. (All photos author)

New York/JFK is the destination for Air France's Airbus A380-800 service from Paris.







A view toward the north from the central area above Terminal E to the flight line.



Loading virtually complete, Turkish Airlines Boeing 777-300ER, TC-JJG (c/n 40791), prepares for departure.



JFK is the US destination for a number of European and Middle Eastern carriers including EgyptAir.

Below - An Ark Air Airbus A340 shares the ramp with an El Al Boeing 747.



Above - Three British Airways Boeing 747s share the pier with an Iberia Airbus A340.

Temporarily parked remote, an Emirates Airline Airbus A380 and a Singapore Airlines Boeing 747 - the latter now withdrawn from services.





# FREE

## DVD



WORTH  
£12.49



The final year of flight testing of the Super Jupiter, with stops in Colombia, Thailand, Vietnam, South Korea, America, Australia, the Philippines, the United Arab Emirates, concluding with the first arrival in Singapore in October 2007.

### THREE EASY WAYS... TO ORDER THIS FANTASTIC SUBSCRIPTION OFFER!



ONLINE



PHONE



POST

Subscribe at:  
[www.airlinerworld.com](http://www.airlinerworld.com)

UK 01780 480404  
OVERSEAS +44 1780 480404  
Monday to Friday  
9.00am until 5.30pm  
Fax UK 01780 757812  
Overseas +44 1780 757812

Complete the form and post to:

Airliner World,  
Key Publishing Ltd,  
PO Box 300, Stamford,  
Lincs, PE9 1NA,  
United Kingdom

WHEN YOU TAKE  
OUT A 2 YEAR OR  
DIRECT DEBIT  
SUBSCRIPTION TO

**Airliner  
World**

nsa

**FREE  
MAGAZINES**

**6 WITH EVERY  
2 YEAR SUBSCRIPTION**

**2 WITH EVERY  
1 YEAR SUBSCRIPTION**

Image: Simon Larsson

**AMERICAN READERS**

Readers in the USA may place orders by telephone toll-free  
800-676-4049 or fax 757-428-6253 or by writing to

Airliner World, 3330 Pacific Ave, Ste 500,  
Virginia Beach, VA 23451-9828

Alternatively, order online at  
[www.imsnews.com/airlinerworld](http://www.imsnews.com/airlinerworld) quoting/entering ALW812

# MAKE HUGE SAVINGS

when you pay by easy Direct Debit – just £9.50 every quarter

☒ **YES**, I would like to subscribe to **Airliner**

## PAYER'S DETAILS

Title First name Surname  
Address

Postcode Country  
Email address

Please complete to receive news updates and offers from us by email

## DELIVERY ADDRESS (if different)

Title First name Surname  
Address

Postcode Country  
Email address

## SPECIAL OFFER (PLEASE TICK)

			24 ISSUES
UK	12 issues	<input type="checkbox"/> £41.00	24 issues <input type="checkbox"/> £79.00
Europe	12 issues	<input type="checkbox"/> £61.00	24 issues <input type="checkbox"/> £113.00
USA	12 issues	<input type="checkbox"/> \$69.00	24 issues <input type="checkbox"/> \$129.00
Rest of the World	12 issues	<input type="checkbox"/> £51.00	24 issues <input type="checkbox"/> £96.00

## PAYMENT DETAILS

☐ ☐ ☐

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

OFFER CLOSE DATE: 31 AUGUST 2012 PLEASE QUOTE: ALW812

## INSTRUCTION TO YOUR BANK OR BUILDING SOCIETY TO PAY BY DIRECT DEBIT

Please fill in the form in ballpoint pen and send to  
Key Publishing Ltd, PO Box 300, Stamford, Lincolnshire, PE9 1NA, United Kingdom



Name and full postal address of your Bank or Building Society		Originator's Identification Number
To The Manager	Bank/Building Society	6 5 8 9 6 0
Address		Reference Number
Name(s) of the Account Holder(s)		Instruction to your Bank or Building Society
		Please pay Key Publishing Ltd Direct Debits from the account detailed in this instruction subject to the safeguards assured by the Direct Debit Guarantee. I understand that this instruction may remain with Key Publishing Ltd and, if so, details will be passed electronically to my Bank/Building Society
Bank/Building Society account number		Signature(s)
		Date
Branch Sort Code		Banks and Building Societies may not accept Direct Debit instructions for some types of account

### The Direct Debit Guarantee

This guarantee is offered by all banks and building societies that accept instructions to pay Direct Debits.

If you receive a refund, you are not entitled to, you must pay it back when Key Publishing Ltd asks you to.

If an error is made in the payment of your Direct Debit by Key Publishing Ltd or your bank or building society you are entitled to a full and immediate refund of the amount paid to or your bank or building society.

If there are any changes to the amount, date or frequency of your Direct Debit Key Publishing Ltd will notify you. If you wish to stop your Direct Debit, you must give notice to your bank or building society. If you wish to stop your Direct Debit, you must give notice to your bank or building society. If you wish to stop your Direct Debit, you must give notice to your bank or building society.

You can cancel a Direct Debit at any time by simply contacting your bank or building society. Written confirmation may be required. Please check ready to.

Direct Debit UK only. If paying by Direct Debit please send in form. Please allow 28 days for gift delivery.





## The latest commercial aircraft deliveries from manufacturers and lessors.

Hong Kong Airlines' latest Cargo Airbus A330-243F, F-WWKL (c/n 1230), landing after a test flight at Toulouse, France in early June.

Yvan Panis

An interesting visitor to Manchester UK in June was this ex-easyJet Airbus A319, CC-AFY (c/n 2129), which arrived for maintenance checks before delivery to Sky Airlines of Chile.

Kyle Nixon



### EMIRATES AIRLINE (EK/UA)

A6-EBO	B777-31HER	33501	now lsd fr ALC
<b>QATAR AIRWAYS (QR/QTR 'QATARI')</b>			
A7-AHT	A320-232	5078	ex F-WWKL, dd 10.04.12
<b>AIR CHINA (CA/CCA)</b>			
B-2090	B777-31ER	38669	dd 24.04.12
B-3999	B737-79L	41090	ex D-ACB1, dd ex-Hamburg 27.04.12 after cabin outfitting
B-6541	A330-243	1304	ex F-WWYT, dd 24.04.12
B-6883	A321-231	5124	ex D-AVZA, dd 27.04.12
<b>BEIJING CAPITAL AIRLINES (CBJ/ 'CAPITAL JET')</b>			
B-6769	A320-214	5114	ex F-WWIT, dd 26.04.12, lsd fr Hong Kong Airlines
B-6859	A320-214	5072	ex F-WWVK, dd 02.04.12, lsd fr Hong Kong Airlines

### CHINA EASTERN AIRLINES (MU/CES)

B-3096	ERJ-135BJ	1145	ex PT TIF, dd 21.04.12, lsd fr Minsheng Financial Leasing
B-6546	A330-243	1303	ex F-WWYS, dd 20.04.12

### CHINA EASTERN YUNNAN AIRLINES (3Q/CYH)

B-5647	A321-231	38105	lsd fr ACG
--------	----------	-------	------------

### CHINA SOUTHERN AIRLINES (CZ/CSN)

B-5135	E190-100LR	0535	ex PT TUV, dd 28.04.12, lsd fr CDB Leasing
B-5283	B737-710	38919	dd 16.04.12
B-6766	A320-214	4919	ex B-5031, dd 17.04.12
B-7117	5-92A	920156	ex N156F, reg'd 21.03.12

### CHINA UNITED AIRLINES (CM/CUA 'LIANHANG')

B-4091	A319-115	5088	ex D-AVYP, dd 05.04.12
--------	----------	------	------------------------

### CHINA WEST AIR (PN/CWB 'WEST CHINA')

B-6420	A319-133	5105	ex D-AVYS, dd 30.04.12, lsd fr Hainan Airlines
--------	----------	------	--

### DALIAN AIRLINES

B-5639	B737-89L	40033	dd 18.04.12, lsd fr Air China
--------	----------	-------	-------------------------------

### GUANGDONG PROVINCE GENERAL AVIATION CO

B-9461	Ce 208B	2320	ex N90243, reg'd 14.02.12
B-9462	Ce 208B	2326	ex N9031X, reg'd 23.02.12

### HAINAN AIRLINES (HU/CHN)

B-5661	B737-84P	38152	dd 12.04.12
--------	----------	-------	-------------

### SHANGHAI HOA HAI GENERAL AVIATION CO

B-9468	Ce 208B	2320	ex N20575, reg'd 19.04.12
--------	---------	------	---------------------------

### SHENZHEN AIRLINES (4G/CSZ)

B-6856	A320-232	4929	ex B-504L, dd 25.04.12
--------	----------	------	------------------------

### SICHUAN AIRLINES (3U/CSG 'CHUANHANG')

B-6905	A320-232	4911	ex B-502L, dd 12.04.12
--------	----------	------	------------------------

### SICHUAN WEST CHINA GENERAL AVIATION CO

B-9467	Ce 208B	2184	ex N9004G, reg'd 09.04.12
--------	---------	------	---------------------------

### SPRING AIRLINES (PS/CQH)

B-6902	A320-215	5108	ex F-WWIV, dd 24.04.12
--------	----------	------	------------------------

### TIANJI AIRLINES (GS/GCR 'CHINA DRAGON')

B-3191	E190-100LR	19000521	corrects c/n
--------	------------	----------	--------------

### UNIVERSAL AIRLINES

B-3192	E190-100LR	19000536	ex PT TUV, dd 26.04.12
--------	------------	----------	------------------------

### XIAMEN AIRLINES (MF/CCA)

B-5633	B737-85C	38389	dd 05.04.12
B-5635	B737-85C	38390	dd 26.04.12

### CATHAY PACIFIC AIRWAYS (CX/CPA)

B-604	B777-367ER	37898	dd 17.04.12
-------	------------	-------	-------------

### AIR CANADA (AC/ACA)

AIR INUIT (IM/AIE)	C-FAIV	Dash 8-102	235 modified to Dash 8-106
--------------------	--------	------------	----------------------------

### AIR NORTH CHARTER & TRAINING (4N/ANT)

C-GENW	H5748 Sx 2A	1758	rr C-GANA
--------	-------------	------	-----------

### AIR TINDI (IT)

C-FAFG	Ce 208B	0724	ex N997Q
--------	---------	------	----------

### BLACKSHEEP AVIATION & CATTLE CO LTD

C-FMKP	Ce 208	00189	reg'd 25.04.12
--------	--------	-------	----------------

### BUFFALO AIRWAYS (4B/BFL)

C-FAYU	CI-215	1106	bf Govt of Newfoundland & Labrador
--------	--------	------	------------------------------------



### ENERJET (EG/ENJ)

C-FENJ	B737-73V	30244	ex N530CL, reg'd 09.05.12, lsd fr AWAS
--------	----------	-------	--

### FIRST AIR (7F/FAB)

C-GLHR	ATR 72-212	423	conv'd to ATR 72-212(F) by Arena, dd ex Naples
--------	------------	-----	--

### HARBOR AIR (H3/SHO)

C-FAWA	DHC-2	1430	ex VH-PGL
--------	-------	------	-----------

C-FLBE	DHC-2	792	ex N1786B
--------	-------	-----	-----------

C-FSKZ	DHC-2	1594	ex CF-SKZ
--------	-------	------	-----------

C-FWAC	DHC-2	1356	ex N68089
--------	-------	------	-----------

C-GEND	DHC-3	371	
--------	-------	-----	--

C-GFDH	DHC-2	606	ex 53-2810
--------	-------	-----	------------

C-GMKP	DHC-2	1374	ex N87775
--------	-------	------	-----------

C-GOLC	DHC-2	1392	ex N62354
--------	-------	------	-----------

### JOHNNY MAY'S AIR CHARTERS

C-GMAY	DHC-2	1123	rr C-GRHF
--------	-------	------	-----------

### KELOWNA FLIGHTCRAFT (KW/KFA)

C-GKFT	DC-10-30(F)	46917	ex N303WL, reg'd 05.04.12, parked at Hamilton since 09.10
--------	-------------	-------	---

### MUSTANG HELICOPTERS

C-GZAN	Bell 212	30589	ex N2135J, reg'd 17.05.12
--------	----------	-------	---------------------------

### OSPREY WINGS

C-GPWF	DHC-6-100	99	ex N990KD, lsd fr Ashe Aircraft
--------	-----------	----	---------------------------------

### REGIONAL T AIRLINES

C-GOSW	Dash 8-202	428	modified to Dash 8-201
--------	------------	-----	------------------------

### TRANS CAPITAL AIR

C-GVPP	DHC-7-102	072	ferried to Toronto after UN contract
--------	-----------	-----	--------------------------------------

### VAN CITY SEAPLANES

C-FJFQ	DHC-2	963	ex CF-JFQ
--------	-------	-----	-----------

### WEST CARIBOU AIR SERVICE

CF-BJY	DHC-2	173	
--------	-------	-----	--

C-FYLZ	DHC-3	247	ex VH-SBR
--------	-------	-----	-----------

### LAW AIRLINES (LA/LAW)

CC-BAW	A320-214	5124	ex D-AVVD, dd 25.04.12
--------	----------	------	------------------------

### SKY AIRLINE (H2/SRU 'AEROSKY')

CC-AFY	A319-111	2170	ex G-EZEC
--------	----------	------	-----------

### ORBEST (40/OBS)

CS-TDH	A330-343X	833	ret fr XL Airways France
--------	-----------	-----	--------------------------

### WHITE AIRWAYS (WHT 'WHITEJET')

CS-TQV	A310-304	494	ferried Alverca - Istanbul
--------	----------	-----	----------------------------

### AIR BERLIN (AB/BER)

D-ABQH	Dash 8-402	4256	st NAC 01.11 & lsd back
--------	------------	------	-------------------------

D-ABQI	Dash 8-402	4264	as D-ABQH
--------	------------	------	-----------

D-ABQJ	Dash 8-402	4274	
--------	------------	------	--

### HAMBURG AIRWAYS (HK/HAY)

D-AHHD	A320-214	0716	ex G-OMYA, dd 14.05.12, lsd fr GECAS
--------	----------	------	--------------------------------------

### LUFTHANSA (LH/DLM)

D-ABYA	B747-830	37827	ex N5016R, dd 25.04.12
--------	----------	-------	------------------------

D-AIKP	A330-343E	1292	ex F-WWYQ, dd 04.04.12
--------	-----------	------	------------------------

D-AIKQ	A330-343E	1305	ex F-WWYV, dd 27.04.12
--------	-----------	------	------------------------

D-AIZK	A320-214	5122	ex D-AVVA, dd 23.04.12
--------	----------	------	------------------------

### TUFLY.COM (43/TUI)

D-ATUJ	B737-8KS	39923	ex N1787B, dd 16.04.12, lsd fr RBS
--------	----------	-------	------------------------------------

D-ATUK	B737-8KS	39094	ex C-GRWZ, ret fr Canjet
--------	----------	-------	--------------------------

### KL AIRWAYS GERMANY (IGL 'STARDUST')

D-AXLD	B737-8FH	35093	ex C-GDQ, ret fr Canjet
--------	----------	-------	-------------------------

D-AXLE	B737-8Q8	30724	ex C-GDGT, ret fr Canjet
--------	----------	-------	--------------------------

D-AXLF	B737-8Q8	28216	ex C-GDGY, ret fr Canjet
--------	----------	-------	--------------------------

### AIR EUROPA (UX/AEA)

EC-LPQ	B737-8SP	35496	dd 30.04.12
--------	----------	-------	-------------

EC-LPR	B737-8SP	36588	dd 10.04.12
--------	----------	-------	-------------

### AIR NOSTRUM (YV/WANE 'MOSTRU AIR')

EC-LQV	ATR 72-600	995	ex F-WWLT, dd 26.04.12, lsd fr NAC
--------	------------	-----	------------------------------------

EC-LRN	ATR 72-600	999	ex F-WWLV, dd 03.05.12, lsd fr NAC
--------	------------	-----	------------------------------------

### VOLOTEA AIRLINES (V2/VDE)

EI-EWI	B717-2BL	55170	ex N906ME, dd 04.05.12, lsd fr Boeing
--------	----------	-------	---------------------------------------

### VUELING AIRLINES (VV/VLG)

EC-LJI	A320-214	4661	ret fr Andes Ise
--------	----------	------	------------------

EC-LQL	A320-232	1749	ex EI-EUJ, dd 02.04.12, lsd fr ILFC
--------	----------	------	-------------------------------------

EC-LQM	A320-232	2223	ex EI-EUH, dd 02.04.12, lsd fr ILFC
--------	----------	------	-------------------------------------

EC-LQJ	A320-232	1933	ex EI-EUI, dd 13.04.12, lsd fr ILFC
--------	----------	------	-------------------------------------

EC-LRA	A320-232	2479	ex EI-EUO, dd 14.04.12, lsd fr ILFC
--------	----------	------	-------------------------------------

EC-LRE	A320-232	1914	ex EI-EUH, dd 13.04.12, lsd fr ILFC
--------	----------	------	-------------------------------------

### RYANAIR (FR/RVR)

EI-EVA	B737-8AS	40296	dd 02.04.12
--------	----------	-------	-------------

EI-EVN	B737-8AS	40294	dd 05.04.12
--------	----------	-------	-------------

EI-EVO	B737-8AS	40297	ex N1786B, dd 24.04.12
--------	----------	-------	------------------------

EI-EVP	B737-8AS	40293	ex N1787B, dd 27.04.12
--------	----------	-------	------------------------

### ATA AIRLINES (41/TBZ)

UR-CIK	MD-83	09627	ex SX-BTM, dd 02.12, lsd fr Khors Air
--------	-------	-------	---------------------------------------

### CASPIAN AIRLINES (CPN)

EP-CPU	MD-83	53149	ex AL-YAA, corrects previous info
--------	-------	-------	-----------------------------------

### TABAN AIR (HH/TBM)

TC-TLC	B737-400	25112	ex N780AS, sub-isd fr Tailwind Airlines, noted Teheran 04.12
--------	----------	-------	--

### ESTONIAN AIR (OV/ELL)

ES-ASO	Saab 340B	223	ex SE-KSL, dd 03.12, lsd fr Swedish Aircraft
--------	-----------	-----	--

### ETHIOPIAN AIRLINES (ET/ETH)

ET-APK	B737-860	40964	ex N1786B, dd 12.04.12
--------	----------	-------	------------------------

BE-LAVIA (B2/BRU 'BELARUS AVIA')	FW-001PB	B767-32ER	33968
----------------------------------	----------	-----------	-------

KYRGYZSTAN AIRLINES (RR/KGA)	EX-37501	B737-590	26419
------------------------------	----------	----------	-------

### AIR CORSICA (IXX/CCM 'CORSICA')

F-HDMF	A320-214	4463	named 'Sanguinari'
--------	----------	------	--------------------

### AIR FRANCE (AF/AFR)

F-GIYE	B747-428	25601	st Chitrop North America
--------	----------	-------	--------------------------

F-GZNL	B777-328ER	40063	dd 02.03.12, st SAFE No.9
--------	------------	-------	---------------------------

F-GZNO	B777-328ER	38665	ex (F-GZNM), dd 11.04.12, st GECAS & lsd back
--------	------------	-------	---

a/c	aircraft
ak	airline
awys	airways
bf	bought from
br	broken up/scrapped
ca	colour
ca	manufacturer
cn	construction/serial number
conv'd	converted
dbf	damaged beyond repair
db	damaged beyond repair
dd	delivery date
ex	previous reg'n
ff	first flight
fr	freighter
fr	revenue flight
ld fr	lead from
ld to	lead to
mn	man
ntu	not used up
oo	on order
op	operated
pa	passenger
perfu	permanently withdrawn from use
reg'd	registered
reg'n	registration
ret fr	returned from
ret to	returned to
rv	re-registered
rvs	return to service
sb	sold by
scr	scrapped/broken up
sd	sold to
std	stored
tba	to be advised
unk	unknown
unf	undamaged (return)
use	used
w/o	without/destroyed

F-HBNK	A320-214	5084	ex F-WWU, dd 16.04.12, st GECAS & lsd back
<b>AIR MEDITERRANÉE (ML/BHE)</b>			
F-GIAZ	A321-211	0519	ret fr Myanmar Airways after lease
<b>AIRLINAIR (AS/BLA)</b>			
F-HAPL	ATR 72-212A	654	ex F-DUG, dd 20.04.12, lsd fr Hahnix lease
<b>CHALAIR (CE/CLG)</b>			
F-HBCG	B737-800	UE-70	ex PH-RNG, reg'd 24.04.12
F-HETS	B737-800	UE-360	ex PK-TVL, reg'd 12.04.12
<b>EUROPE AIRPOST (SO/FPD)</b>			
F-GKKE	B737-300(BC)	26850	st ASL Aviation Group Ltd 29.04.12 & lsd back
F-GIXR	B737-300(F)	27125	st NBB Gadow Co Ltd (BBAM) & lsd back
F-GIXS	B737-300(F)	27347	st NBB Shweier Co Ltd (BBAM) & lsd back
<b>REGIONAL - COMPAGNIE AERIEENNE EUROPEENNE (YS/RAE)</b>			
F-HBXO	E170-100LR	D032	ex EI-DFK, dd 25.04.12, lsd fr GECAS
<b>TRANSVIA FRANCE (TO/TVF)</b>			
F-GZHA	B737-800	34901	ret fr Canjet lease
F-GZHB	B737-800	34902	as F-GZHA
PH-H2D	B737-800	34169	dd 13.04.12, lsd fr Transavia
<b>ATLANTIC AIRLINES (NPT 'NEPTUNE')</b>			
G-JACM	B737-300(F)	24679	ex EC-KRA, reg'd 30.04.12, lsd fr BOC
<b>BRISTOW HELICOPTERS (BHL)</b>			
G-CHBY	Agusta AW139	31310	ex OY-HLB, reg'd 16.05.12, lsd fr Bel Air A/S
<b>EASVJET (UZ/EZY 'EASY')</b>			
G-EZUD	A320-214	5052	ex D-AUBA, dd 04.04.12
G-EZUP	A320-214	5056	ex D-AUBB, dd 03.04.12
G-EZUR	A320-214	5064	ex D-AUBD, dd 12.04.12
G-EZUS	A320-214	5104	ex D-AUBS, dd 05.04.12
G-EZUT	A320-214	5113	ex D-AUBW, dd 17.04.12
G-EZUV	A320-214	5111	ex D-AUBV, dd 19.04.12
G-EZUW	A320-214	5116	ex D-AUBY, dd 13.04.12
<b>FLYBE (BE/BEE 'JERSEY')</b>			
G-F8JE	E170-200SD	0336	ex PT-TUS, correct c/n
<b>THOMSON COOK AIRLINE (MT/CK 'WESTREL')</b>			
G-JACG	B757-200	26278	ex C-GJZD, ret fr Jazz Air
G-TGBA	B757-200	28203	ex C-GJZB, ret fr Jazz Air
G-WJAN	B757-200	28674	ret fr Westjet
<b>THOMSON AIRWAYS (BY/TOM)</b>			
G-FDZA	B737-800	35134	ret fr Surweing lease
G-FDZB	B737-800	35131	as G-FDZA
G-FDZF	B737-800	35138	as G-FDZA
G-TAWH	B737-800	38107	dd 12.04.12, lsd fr ACG
G-TAWH	B737-800	37267	dd 19.04.12, lsd fr TUI
<b>WIZZ AIR (W6/WZZ)</b>			
HA-LWO	A320-232	5123	ex F-WWBP, dd 27.04.12
<b>EDELWEISS AIR (JR/EDW)</b>			
HB-JJV	A320-214	2024	ex F-WWOK, dd 15.04.12, sub-leased fr Swiss
HB-JMU	A340-313X	150	named Zug
<b>ZIMEX AVIATION (CA/HMX)</b>			
HB-LRN	DMC-630Q	636	ex ST-LRN, ret fr lease in Sudan, reg'd 06.04.12

<b>AEROMASTER AIRWAYS</b>			
HC-	ATR 42-320	213	ex OY-PCD, dd 05.04.12, lsd fr HAC
<b>TORTUGA AIR</b>			
HN-ZET	J5-320T	907	ex H264CA, corrects previous info
<b>LAN COLOMBIA (4C/ARE)</b>			
HI-860	J5-320EP	944	ex N944AE
HK-4724	Dash 8 Q402	4137	st HAC 12.10 & lsd back
HK-4725	Dash 8 Q402	4124	as HK-4724
HK-4726	Dash 8 Q402	4119	as HK-4724
HK-4727	Dash 8 Q402	4129	as HK-4724
<b>SATENA (PR/RNE)</b>			
HK-4747	ATR 42-500	526	now lsd fr HAC
HK-4748	ATR 42-500	522	now lsd fr HAC
<b>WY-PRIMAIR</b>			
HK-4811	A320-214	1564	ex H260AV, dd 11.04.12
HK-	A320-214	1725	ex H262AV, dd 04.05.12 (both lsd fr GECAS)
<b>AIR BUSAN (BX/ABL)</b>			
HL-7761	A321-231	1227	ex H127AG, dd 16.02.12, sub-leased fr Asiana
<b>KOREAN AIR (KE/KAL)</b>			
HL-B245	B737-800	38827	dd 02.04.12, sd fr ILFC
<b>COPA AIRLINES (CM/CPM)</b>			
HP-1730CMP	B737-800	38141	dd 05.04.12
HP-1821CMP	B737-800	41089	dd 19.04.12
<b>ISLEARN DE AVIACION (WC/ISV)</b>			
HR-AXN	ATR 42-320	378	ex H378NA
<b>SAUDI ARABIAN AIRLINES (SV/SVA)</b>			
HZ-ASF	A320-214	4955	repainted into SkyTeam colours
<b>LIVINGSTON (NLV)</b>			
EI-ERH	A320-232	2157	named Laveno Mombello
<b>ANA - ALL NIPPON AIRWAYS (NH/ANA)</b>			
JA741A	B777-200ER	40900	dd 19.04.12
JA808A	B787-8	34490	dd 15.04.12
<b>ASAHI KOKU</b>			
JA6930	AS332L	2015	ex (LN-OXX), dd 15.09.11
<b>IBEX AIRLINES (FW/IBX)</b>			
JA03R3	CRJ200	7624	purch off lease 23.03.12
<b>J-AIR (XM/JAL)</b>			
JA203J	CRJ200	7626	lsd fr JAL, (purch by JAL from lessor 27.03.12 & lsd to J-Air)
<b>JAL EXPRESS (JC/JEX 'JANEX')</b>			
JA342J	B737-800	39191	dd 18.04.12
<b>JAPAN AIRLINES (JL/JAL)</b>			
JA826J	B787-8	34836	dd 25.04.12
JA827J	B787-8	34837	dd 25.04.12
<b>JAPAN TRANSOCEAN AIR (NJA/JTA 'JAL OCEAN')</b>			
JA8991	B737-446	27916	reg'd 30.03.12
JA8992	B737-446	27919	reg'd 30.03.12
JA8993	B737-446	28087	reg'd 30.03.12
JA8995	B737-446	28831	reg'd 30.03.12
JA8996	B737-446	28832	ex H1786B, reg'd 30.03.12
<b>JETSTAR JAPAN (JK)</b>			
JA01JJ	A320-232	5093	ex F-WWJN, dd 24.04.12, lsd fr Qantas

<b>SOLASEED AIR (6J/SNJ 'NEWSKY')</b>			
JA804X	B737-800	38026	dd 30.04.12, lsd fr GECAS
<b>STARFLYER (7G/FSJ)</b>			
IA07MC	A320-214	5102	ex F-WWVS, dd 20.04.12, lsd fr GECAS
<b>ROYAL JORDANIAN AIRLINES (RJ/RJA)</b>			
JY-ART	A321-231	5099	ex D-AZAV, dd 16.04.12, lsd fr AWAS
<b>WIDERØE'S FLYVESELSKAP (WF/WIF)</b>			
EC-JCL	CRJ200	7975	ex C-FCID, dd 08.04.12, wet lsd fr Air Nostrum
<b>WEST AIR LUXEMBOURG (LX/WAL)</b>			
LX-WAL	BAe ATP(F)	2059	ex SE-LHZ
LX-WAM	BAe ATP(F)	2060	ex SE-LPU
<b>AVION EXPRESS (N9/NVD)</b>			
LY-COS	A320-231	0415	ex EI-ETM, dd 27.04.12, lsd fr Tnton Aviation, op for Cosmo Airlines
<b>ABX AIR (06/ABX 'ABEX')</b>			
N317CM	B767-330ER(F)	24317	ferried Mojave - Wilmington 27.04.12 after temp storage
<b>AIRTRAN AIRWAYS (FL/TRS 'CITRUS')</b>			
N166AT	B737-700	33917	tr Southwest 26.04.12
N267AT	B737-700	33919	N7713A resv d
N272AT	B737-700	33921	N7715E resv d
N292AT	B737-300	33926	tr N7730A, tr Southwest 15.05.12
N300AT	B737-700	33923	N7734H resv d
N307AT	B737-700	24862	N7735A resv d
N311AT	B737-700	33930	N7738A resv d
N312AT	B737-700	35110	N7739A resv d
N313AT	B737-700	33927	N7740A resv d
N315AT	B737-700	35788	N7741C resv d
N316AT	B737-700	33928	N7742B resv d
N318AT	B737-700	33931	N7744A resv d
N7714B	B737-700	32679	tr to Southwest 03.12
<b>ALLEGIANTE AIR (G4/AAV)</b>			
N427MV	MD-82	49436	modified to MD-83 04.12
N901NV	B757-200ER	26963	ex DAI-AFL, ret fr Air Finland
<b>AMERICAN AIRLINES (AA/AAI)</b>			
N889NN	B737-823	33314	dd 03.04.12, st ILFC on dely & lsd back, in trust with Wilmington Co
N890NN	B737-823	31143	ex H1786B, dd 17.04.12, st Wells Fargo Bank Northwest as trustee on dely & lsd back
N616AA	B757-223	24524	ferried Roswell - Dallas for rts after storage
N627AA	B757-223	24585	lsd fr CIT
<b>DELTA AIR LINES (DL/DAL)</b>			
N690DL	B757-232	27585	ferried Marana - San Antonio 27.04.12 for maintenance & rts after storage
<b>EP AVIATION LLC</b>			
N602AR	Casa 212-200	161	ex 9H-AAR
N603AS	Casa 212-200	162	ex 9H-AAS
N801AR	S-61N	61761	ex C-FHCN
<b>EXPRESSJET AIRLINES (EV/ASQ 'ACEY')</b>			
N28529	ER-135LR	145512	ret fr Chautauque Airlines sub-lease, lsd fr United
<b>FEDEX EXPRESS (FM/FOX 'EXPRESS')</b>			
N579SH	B757-236	24371	tr N958FD
N583WA	B757-222	26705	bl ILFC
N750NA	B757-28A	26277	ferried Victorville
N961FD	B757-200	25268	Mobile 01.05.12 for cargo conversion
<b>GOJET AIRLINES (G7/GJS 'LINGBERGH')</b>			
N340CA	CRJ700	10062	ex C-GIBI, dd 10.04.12
N355CA	CRJ700	10067	ex C-GIBT, dd 04.04.12
N368CA	CRJ700	10075	ex C-GIAD, dd 10.04.12 (A, lsd fr Delta)
<b>HAWAIIAN AIR (HA/HAL)</b>			
N386HA	A330-243E	1302	ex F-WWYO, dd 26.04.12
<b>HORIZON AIR (QX/QXE)</b>			
N448QX	Dash 8-Q402	4409	ex C-GMYH, dd 02.05.12

We welcome any feedback on this listing.

(The listing is alphabetical with reference to the registration of the country of origin.)



Dassault 2000, F-WWU, prior to a final test flight at Bordeaux, France, prior to its delivery to Canada for final outfitting and delivery. (Sauthier Bonnet)

Pictured at Palma de Mallorca, Spain on May 24 was the first Airbus A321-211 to appear in a Condor livery. The aircraft, D-AIAA (c/n 1607) ex-D-ALSD was delivered in May. (Lufthansa)



The latest Boeing 747-8R7F for Cargolux, LX VCE (c/n 35810), about to get airborne from Boeing's Everett facility. (Joe G Walker)



This ex-Cirrus Airlines Embraer 170, G-CHBI (c/n 0006), has been placed on the UK register and was parked at Exeter, UK in May awaiting placement. (Ian Maskell)

JETBLUE AIRWAYS (JB/JBU)			
N796JB	A320-232	5060	named '100% blue'
NATIONAL AIRLINES (NA/NCR)			
N176CA	B757-28A	24543	ex G-STRW, dd ex-Latham 19.04.12, lsd fr Wells Fargo Bank Northwest
NEW ENGLAND AIRLINES			
N123NE	BA 2A 26	46	rr N403WB
SAN JOAQUIN HELICOPTERS			
N205SJ	Bell 205A-1	30110	ex C-GVHO
SILVER AIRWAYS (3M/SIL)			
N444XJ	Saab 340B	444	rr N344AG
SOUTHERN AIR (9S/SOO)			
N401SA	B747-4H6(F)	27044	ex N420AC, dd 18.04.12 lsd fr Newcastle dd 24.04.12
N777SA	B777-32ER	37989	
SOUTHWEST AIRLINES (WN/SWA)			
N7702A	B737-7BD	33917	ex N166AT
N7714B	B737-76N	32679	ex N126AT
N7730A	B737-3BD	33926	ex N292AT
N8301J	B737-8H4	36980	named 'Warrior One' dd 16.04.12
N8303R	B737-8H4	36681	ex N1786B, dd 23.04.12
N8305E	B737-8H4	36683	dd 30.04.12
N8306H	B737-8H4	36983	dd 30.04.12
N8600F	B737-8H4	39882	dd 19.04.12, lsd fr ACG
TRANS STATES AIRLINES (LOF 'WATERSKI')			
N802HK	ERJ-135EP	145066	lsd fr CIT
UNITED AIRLINES (UA/UAL)			
N39450	B737-924ER	40004	dd 02.04.12
N39451	B737-924ER	31646	dd 16.04.12
UNITED PARCEL SERVICE (5X/UPS)			
N350UP	B767-34AF	37873	dd 16.04.12, st CC & E I LLC & lsd back on duty dd 23.04.12, st CC & E I LLC & lsd back on duty
N351UP	B767-34AF	37874	
VIRGIN AMERICA (VX/VRO 'REDWOOD')			
N852VA	A320-214	5004	named 'safely voyager'
NORWEGIAN AIRWAYS (NOR/NW)			
D-ABDP	A320-214	3093	ex F-WWIT, dd 28.03.12, lsd fr Air Berlin
D-ABFP	A320-214	4743	ex D-AYVJ, dd 25.04.12, lsd fr Air Berlin
HOLIDAY CZECH AIRLINES (HCC)			
OK-LEE	A320-214	2719	ex F-WWDC, has Iceland Express titles ex F-WWDP
TRAVEL SERVICE AIRLINES (TS/TYS 'SKYTRAVEL')			
OK-TYH	B737-8QH	35275	ex C-GVHs, ret fr Sunwing ex C-FTAH, dd 20.05.12, sub lsd fr Sunwing
OK-TVJ	B737-8QH	29351	ex C-GVHs, ret fr Sunwing
OK-TVK	B737-86N	32740	ex C-GVHs, ret fr Sunwing
AIR EXPLORE (AXE)			
OM-CEX	B737-436	25839	ex DX-WGY, dd 19.04.12 lsd fr BBAW
JETAIRFLY (TUI AIRLINES BELGIUM) (TB/JAF 'BEAUTY')			
OO-IAA	B737-8BK	29660	ex C-FJAA, ret fr Sunwing
OO-JBG	B737-8KS	35142	ret fr Canjet lease
OO-JBV	B737-8KS	27990	ex CN-RPE, regd 27.04.12 lsd fr TJI
OO-JLO	B737-8KS	34692	ex CN-RPG, regd, lsd fr TUI an jet4you colours
OO-JPT	B737-8KS	34691	ex CN-RPF, regd 30.03.12, lsd fr TJI
BANCOPTEA'S			
OY-HNA	EC 225LP	2825	regd 01.05.12 lsd fr Exa Leasing
CORENDON DUTCH AIRLINES (CHD)			
PH-CDF	B737-804	28227	ex G-CDZH, dd 02.05.12, lsd fr Newcastle
KLM ROYAL DUTCH AIRLINES (KL/KLM)			
PH-AKD	A330-303	1300	ex F-WWYC, dd 18.02.12, lsd fr GECAS
PH-BQK	B777-206ER	29399	wears KLM Asia livery & logo as PH-BQK
PH-BQM	B777-206ER	34711	as PH-BQK
PH-BQN	B777-206ER	32720	as PH-BQK
TRANSALIA (THV/TRA)			
PH-GGW	B737-8EH	35831	ex PR-GGW, dd 17.04.12 lsd fr GOL



PH-GGZ	B737-8EH	37600	ex PR-GGZ, dd 25.04.12, lsd fr GOL
PH-HSA	B737-8K2	34171	ex 9Y-TJS, ret fr Caribbean Airways lease
PH-HSF	B737-8K2	39261	ex N1786B, dd 13.04.12
PH-HZE	B737-8K2	28377	ret fr Aeromexico lease
PH-HZI	B737-8K2	28380	ret fr Sun Country Lease
PH-HZL	B737-8K2	30391	ex VQ-BPE, ret fr Moskova lease
PH-HZO	B737-8K2	34169	ret fr Aeromexico lease lsd to Transavia France
WINAIR - WINDWARD ISLAND AIRWAYS (WM/WIA 'WINDWARD')			
PJ-WN	DHC-6-300	682	ex C-GKGG, dd 03.12
AIRMARK AIRLINES			
PK-	B737-300(F)	23535	ex EI-ETW, dd 05.04.12, lsd fr GECAS
ALFA TRANS DINGANTARA			
N2033V	Ce 208	00539	dd 30.03.12, lsd fr Cessna
CITILINK			
PK-GJL	A320-232	4961	ex D-AHAY, dd 23.04.12, lsd fr BOC
GARUDA INDONESIA (GA/GIA)			
PK-GMX	B737-803	30870	ex N1787B, dd 12.04.12
LION AIR (LIT/LNI 'LION INTER')			
PK-JQ	B737-8GP	38317	dd 04.04.12
PK-JR	B737-8GP	37292	dd 23.04.12
MANDALA AIRLINES (RI/MDL)			
PK-RMP	A320-232	5073	ex D-AJBH, dd 23.04.12 lsd fr Tiger Airways
SRINILAYA AIR (SJ/SIV)			
PK-CLA	B737-86N	28591	ex SU-MWD, dd 27.04.12, lsd fr GECAS
PK-	B737-524	27323	ex N27610, dd 14.05.12, lsd fr GECAS
SUSTAIR (SQS)			
PK-	Ce 208B	2273	ex N3042C, dd 02.04.12
PK-	Ce 208B	2293	ex N9012S, dd 02.04.12
AZUL - LINHAS AEREAS BRAZILIERAS (AZ/AZU)			
PR-AXE	E190-200AR	00521	dd 04.12
PR-AZE	E190-100AR	00282	now lsd fr Macquarie Airfinance
OMNI TAXI AEREO			
PR-OMV	EC 225-P	2832	ex F-WWXX, dd 05.12
PR-OMW	EC 225-P	2835	ex F-WWXY, dd 05.12
SETE LINHAS AEREAS			
PR-TJM	Embraer 120ER	120276	rr PR-STI
TAM LINHAS AEREAS (JJ/TAM)			
PR-MYP	A320-214	5066	ex D-AUBE, dd 25.04.12
PR-MYR	A320-214	5107	ex D-AUBT, dd 16.04.12
PR-MYS	A320-214	5109	ex D-AUBU, dd 1.04.12
TRIP LINHAS AEREAS (T4/TIB)			
PP-PTV	ATR 42-500	503	now lsd fr MAC
PP-PTW	ATR 42-500	510	now lsd fr MAC
PP-TKE	ATR 42-500	579	now lsd fr MAC
PP-TKM	ATR 72-600	998	ex F-WWLY, dd 12.04.12 lsd fr ALC
HELIFIX PNG			
P2-HFA	Ce 208B	0954	ex N1242A, b/Gateway Air Center 27.04.12
AEROPLOT RUSSIAN AIRLINES (SU/AFI)			
VO-BMY	A330-343E	1301	ex F-WWYL, dd 12.04.12
AK BARS AERO (2B/BGM)			
VP-BQJ	CRJ200	7613	ex N458CA, dd 23.04.12
DONAVIA (D9/DNV)			
VP-BBT	A319-112	1805	ex C-GKNW, dd 02.05.12, sub lsd fr Air Canada
VP-BBL	A319-112	1630	ex C-FBL, dd 20.04.12 sub lsd fr Air Canada
I-FLY (HS/MSY)			
EI-ETI	A330-322	171	en D-AERS, dd 18.04.12, lsd fr ILFC
METROJET			
EI-ETH	A32-231	0668	ex TC-OAF
EI-ETJ	A32-231	0663	ex TC-OAF
EI-ETK	A321-231	0787	ex TC-OAI
EI-ETL	A321-231	0954	ex TC-OAK
ROSSIYA AIRLINES (RV/SOM)			
EI-ETM	A319-111	1654	ex D-2225, dd 14.04.12, lsd fr CIT
EI-ETD	A319-111	1679	ex D-2223, dd 14.04.12 lsd fr CIT
RUSLINE (7R/RLU)			
VP-BDY	A319-111	2442	ex G-EZD, dd 12.04.12, lsd fr RBS, ferried to Ostrava 18.04.12 for painting
VP-BDZ	A319-111	2446	ex G-EZIE, dd 25.04.12, lsd fr RBS
VQ-BND	CRJ100	7483	ex N442CA, dd 17.04.12
S7 AIRLINES (S7/ABU)			
VQ-BRC	A320-214	5106	ex F-WWLU, dd 24.04.12, lsd fr AWAS
TRANSAERO AIRLINES (UN/TSO)			
EI-OTX	B737-508	28052	ex VQ-BRF, dd 04.04.12 lsd fr ILFC
EI-FUX	B737-708	29352	ex HA-10L, dd ex Shannon, lsd fr ILFC
EI-EUZ	B737-708	29355	ex HA-10R, dd ex Shannon, lsd fr ILFC
N916UN	B747-446	26362	rr EI-X-E dd ex Rome 07.05.12
N922UN	B747-422	27646	ferried Rome Melbourne 13.04.12
UTAIR AVIATION (UT/UTA 'TJUMAVI')			
UR-UH	ATR 72-212A	994	ex F-WWEI, dd 25.04.12 lsd fr UTAir Ukraine
UR-UT1	ATR 72-212A	1000	ex F-WWEJ, dd 28.04.12 lsd fr UTAir Ukraine
VP-BPQ	B737-524	28907	ex N16646, dd ex Sofia 25.04.12
VP-BQA	B757-208	30044	ex TC-ETE, dd 13.04.12, lsd fr JFC
AIRPHIL EXPRESS (2P/GAP)			
RP-CB38	A320-214	5103	ex D-AUBR, dd 19.04.12 lsd fr GECAS
PHILIPPINE AIRLINES (PR/PAL)			
RP-CB616	A320-214	5081	ex D-AUBJ, dd 27.03.12 lsd fr GECAS, lsd to/ro by AirPhil Express
ZEST AIRWAYS (2Z/RT 'ASIAN SPIRIT')			
RP-CB995	A320-232	0872	ex B-6256, dd 03.12, lsd fr Vanta
FLYGLIMKEN VÄTTERBYGÖDEN			
SE-TVP	JS 3102	719	ex G-BIXG, correct pl
MALMO AVIATION (TF/TWE)			
SE-DJP	Avro RJ70	E1254	st QinetiQ Ltd 21.03.12 rr G-BVRU

a/c aircraft  
ah airlines  
awys airways  
bf baggage claim  
b/u on ramp up wrapped  
cans container  
cls container  
on manufacturer construction/serial number  
chvtd converted  
dbr destroyed by fire  
del damaged beyond repair  
dd delivery date  
ex ex-manufacturer  
ff freighter  
fr revenue flight  
hd fr head of front  
ld to leased to  
mst not taken up  
oo on order  
op operated  
pax passenger  
pwr permanently withdrawn from use  
regd registered  
ret fr returned from  
rt to return to service  
sb sold by  
st stored  
td to be advised  
unb unknown  
wfu withdrawn from use  
w/o written off/destroyed



#### NEX TIME JET (2N/NTJ 'NEX TIME JET')

OM VRC ATR 72-202 307 ex F-WKVB, dd 03.12, wet  
ltd fr Danube Wings

#### SAS SCANDINAVIAN AIRLINES (SK/SAS)

LN-RDV Dash 8-402 4054 ex HA-LQA, reg'd  
09.03.12, ex Malev  
LN-RDX Dash 8-402 4057 ex HA-LQB, reg'd  
29.03.12, ex Malev  
LN-RDY Dash 8-402 4062 ex HA-LQC, reg'd  
09.03.12, ex Malev  
LN-RDZ Dash 8-402 4063 ex HA-LQD, reg'd  
29.03.12, ex Malev  
SE-RES B737-700 30737 ex N343MS, dd 17.04.12  
LN-RGA B737-800 39397 ex N1786B, dd 18.04.12  
(both lsd fr GECAS)

#### TUIFLY NORDIC (6B/BLX 'BLUESCAN')

SE-RFX B737-800 37246 dd 10.04.12, lsd fr TUI  
EUROLOT (K2/ELO)  
SP-EQA Dash 8-402 4406 ex C-GMXX, dd 18.05.12  
DUT EXPRSS POLAND (02/JEA/YAP)  
SP-IAF A320-214 2712 ex A6-ABE, dd 26.04.12  
ltd fr CIT  
SP-IAH A320-214 2619 ex D-ABDB, dd 27.04.12  
SP-IAI A320-214 5115 ex OE-LEI, dd 25.04.12,  
lsd fr Niki

#### DUT EXPRSS REGIONAL

SP-KTF ATR 42-320 257 ex OY-PCE  
SP-KTR ATR 42-300 092 ex D-BAAA  
DUT JET (02/JEA)  
SP-IAE A320-214 1454 ex EI-EPX, dd 23.03.12,  
lsd fr ILFC, see last  
month Yes Airways

#### YES AIRWAYS (VAP 'WHITEKNO')

SP-IAD A320-214 2142 ex 9H-AEF, dd 03.04.12,  
sub wet lsd fr Air Malta

#### SUNAIR

4L-AJ5 B737-319 25125 ex OM-CLC, sub-lsd fr  
Vista Georgia

#### MARS LAND AVIATION (M7/MSL)

C5-AAN B737-522 26687 ex 4L-AJE, sub-lsd fr  
Aeolus Air

#### AIR ARABIA EGYPT

SU-AAC A320-214 3246 ex A6-ARM, dd 18.03.12,  
sub-lsd fr Air Arabia

#### PETROLEUM AIR SERVICE

SU-CBY CRJ-900 15278 ex C-GIBL, correct reg'n,  
see March section

#### ASTRA AIRLINES (AZ/AZI)

SX-BJO A320-232 0527 ex PH-AAY, dd 06.04.12

#### MINOAN AIR

SX-BRM Fokker 50 20207 ex PH-KVE,  
dd ex Maasricht 28.04.12

#### CORENDON AIRLINES (KC/CAI)

TC-TJB B737-300 27633 named Ayhan Saracoglu

#### FREEDOM AIRLINES (FH/THY)

TC-FBO A320-214 5096 ex F-WWQD, dd 24.04.12,  
lsd fr ACC

#### OMUR AIR (00/OMY)

TC-0BR A321-231 1008 ex N108DE, dd 14.04.12,  
lsd fr ALS Aircraft Leasing

#### PEGASUS AIRLINES (PG/PGT 'SUNTURK')

TC-CPB B737-820 38177 dd 01.03.12, named 'Doğa'  
TC-CPC B737-820 40878 dd 21.03.12, named 'Öyku'  
TC-CPD B737-820 40726 dd 25.04.12,  
named 'Bera'

#### SUNEXPRESS (KQ/SXS)

TC-JKS B737-73V 32419 1321 ex G-EZJX, dd  
25.04.12, lsd fr BOC  
TC-JKT B737-73V 32420 1341 ex G-EZJY, dd  
25.04.12, lsd fr BOC  
TC-SAC B737-76H 32684 ex TC-JKF, dd 23.03.12,  
lsd fr GECAS,  
op for AnadoluJet  
TC-SAD B737-76H 34754 ex TC-JKG, dd 30.03.12,  
lsd fr GECAS,  
op for AnadoluJet

#### TURKISH AIRLINES (TK/THY)

TC-JFM B737-852 29770 In Star Alliance colours  
TC-JNO A330-343E 1298 ex F-WWKG, dd 16.03.12,  
named 'Boğaziçi'  
TC-JNP A330-343E 1307 ex F-WWYX, dd 26.04.12,  
named 'Gökçeada'  
TC-JRV A321-231 5077 ex D-AVZO, dd 21.03.12  
TC-JRY A321-231 5083 ex D-AZAT, dd 21.03.12  
TC-JRZ A321-231 5118 ex D-AZAH, dd 26.04.12

#### AIR ATLANTA ICELANDIC (CC/ABC)

TF-AMP B747-400 24801 ex LX-ZCV, dd 04.12  
EAGLE AIR  
TF-ORD JS-3102 740 ex G-FARA, dd 25.04.12  
ICELANDAIR (FV/ICE)  
TF-ISL B757-223 25295 ex N661AA  
TF-IST B757-256 29307 ex TC-DGS, dd 04.12,  
lsd fr Maudro Leasing  
(Titan Airways)

#### AIR ASTANA (KC/KZR 'ASTANALINE')

P4-KCF E190-100AR 00537 ex PT-TVE, dd 27.04.12,  
lsd fr ALC

#### UZBEKISTAN AIRLINES (HV/UBZ 'UZBEK')

VP-BUB B757-23P 30060 fr UK75701  
VP-BUD B757-23P 30061 fr UK75702  
AEROSVIT AIRLINES (VV/AEW)  
UR-AAN B737-84R 38119 dd 27.03.12

#### AIR ONIX

UR-KRA B737-33R 28873 ex ES-ABJ, dd 26.04.12,  
lsd fr GECAS

#### OMIPROAVIA (Z7/UDN)

UR-DHL ERI-145LR 145738 correct reg'n  
UR-DHJ ERI-145LR 145316 corrects reg'n  
UR-DHZ ERI-145LR 145436 ex F-WKX,  
correct c/n,  
lsd to Sahand Air  
ex SK-BTM, ret fr Sky  
Wings, lsd to ATA Airlines

#### KHORS AIRCOMPANY (KQ/KHO)

UR-CJE DC-9-83 49852 correct c/n,  
lsd to Sahand Air  
ex SK-BTM, ret fr Sky  
Wings, lsd to ATA Airlines

#### UTAIR UKRAINE (QU/UTM)

UR-JTH ATR 72-212A 994 ex F-WWE, dd 25.04.12,  
lsd fr U-Tair Aviation  
UR-JTI ATR 72-212A 1000 ex F-WWEJ, dd 28.04.12,  
lsd fr U-Tair Aviation

#### BAYSWATER ROAD PTY LTD

VH-EYQ Ce F406 F406-0047 ex TF-ORD, reg'd 16.04.12

#### CHARTAIR

VH-NGP Cessna 402C 0644 ex N644MA,  
reg'd 27.03.12

#### COBHAM AVIATION/NATIONAL JET (MC/NJS)

VH-NXJ B717-2BL 55166 ex N902ME, dd 08.05.12,  
lsd fr Boeing  
VH-NZR B717-2BL 55168 lsd fr Boeing  
VH-NXR B717-2BL 55168 ex N904ME, dd 10.04.12,  
lsd fr Boeing,  
ops as Qantas Link

#### JETSTAR AIRWAYS (JQ/JST)

VH-VFF A320-232 5039 ex F-WWDG, dd 08.03.12,  
lsd fr Qantas

#### NETWORK AVIATION

VH-NHM Fokker 100 11469 ex PH-ZFX, dd ex  
Woensdrecht 21.04.12,  
lsd fr Qantas

#### QANTAS AIRWAYS (QF/QFA)

VH-VZY B737-838 39363 dd 07.03.12, named  
'Temora', st Puntegranate  
Leasing Co & lsd back  
dd 25.04.12, lsd fr CIT,  
named 'Walpole'

#### SKYTRAMS AIRLINES (Q6/SKP)

VH-QOP Dash 8-311 232 ex V2-LGA, reg'd 23.03.12

#### SKYWEST AIRLINES (XR/OZW)

VH-FZD Fokker 100 11305 ex PH-LMY, dd ex  
Woensdrecht 16.03.12  
ex N321AW, dd 13.03.12,  
sub-lsd fr Our Airline

#### SLINGAIR

VH-LMI Ce 208 00298 ex N94M, lsd fr Aviation  
Tourism Australia

#### TOLL AVIATION (TFX)

VH-HPB SA227-DC DC-808B ex VH-HPG, dd 18.04.12,  
lsd fr IAP Group

#### VDS AVIATION (VDS ENTERPRISES PTY LTD)

VH-CYV Pa 31-310 31-18 ex VH-DZ2  
VH-DMF Pa 31-310 31-447  
VH-JRK Cessna 414A 414A0665  
VH-LH Pa 31-350 31-7712021  
VH-PDN Pa 31-310 31-177  
VH-RWG Pa 31-350 31-7852142  
VH-VTR Pa 31-350 31-7952165  
VH-WYY Pa 31-310 31-657 ex VH-WZN

#### VIRGIN AUSTRALIA (DI/VOZ)

VH-XFC A330-243 1293 ex F-WWYU, dd 05.04.12,  
lsd fr Aircastrle  
VH-XFD A330-243 1306 ex F-WWYU, dd 25.04.12,  
lsd fr CIT,  
named 'beis beach'

#### VIRGIN BLUE AIRWAYS (DI/VOZ)

VH-YFI B737-8FE 41000 dd 19.03.12,  
named 'Porpoise Bay'

#### GOAIR (GB/GOW)

VT-GOI A320-214 5112 ex F-WWIK, dd 27.04.12,  
lsd fr GECAS

#### INDIGO (6E/IGO 'IFLY')

VT-IER A320-232 5076 ex F-WWBY, dd 26.03.12,  
st Glenveagh Aviation Ltd  
& lsd back

VT-IES A320-232 5090 ex F-WWDM, dd 29.03.12  
VT-IET A320-232 5094 ex D-AUBM, dd 30.03.12  
VT-IEU A320-232 5092 ex D-AUBL, dd 28.03.12  
st AWAS & lsd back  
ex F-WWIF, dd 04.04.12

#### VT-IEV A320-232 5080

VT-IEV A320-232 5080 ex M-ABEP, dd 16.03.12,  
lsd fr GECAS

#### JET AIRWAYS (9W/JAI)

VT-JBY B737-96NER 35227 ex M-ABEP, dd 16.03.12,  
lsd fr GECAS

#### SPICEJET (SG/SEJ)

VT-SGT B737-86J 37765 dd 05.04.12,  
named 'Cayenne'

#### ROYAL BRUNEI AIRLINES (BI/RBA)

V8-RBU A320-232 2195 ex 9V-TAB, dd 02.12,  
lsd fr CIT

#### AEREO CALAFIA

XA-JVT Emb 120ER 120330 ex N393SW, dd 04.11

#### AEROMEXICO (AM/AMX)

EI-URB B737-852 35115 fr N950AM, lsd fr ALC

#### AEROMEXICO CONNECT (AEROLITTORAL) (SD/SLI)

XA-ACI E190-100LR 0525 ex PT-TLN, dd 27.03.12

#### AIR TRIBE

XA-TRB CV-580 52 ex N588X

#### FLY-MEX

XA-ALA Do328-310 3167 ex N117LM, dd 05.03.12

#### VIVA AEROBUS (VB/AEM)

XA-VIT B737-3K2 27635 ex ZK-SJE, dd 26.03.12,  
lsd fr AWAS not ILFC as  
previously reported

We welcome any  
feedback on  
this listing.

(The listing is alpha-  
betical with reference  
to the registration of  
the country of origin.)



Latest aircraft for  
Ameristar Jet Charter  
McDonnell Douglas  
MD-83, N787TW (c/n  
49945) - ex Avianca  
EI-CBZ and HK-4588.  
The aircraft is pictured  
early in the morning  
on June 5, 2012.  
(Carlos Barreiro)

Starbow Airlines  
BAe 146-300, G-BUHB  
(c/n E3183), at  
Southend, UK. It  
will become 9G-58C  
when delivered to the  
Ghanaian carrier.  
(Dave Putter)





# JP airline-fleets international 2012/2013

Up-to-date information on every commercially operated aircraft over 1.3 tonnes for 55,000 aircraft and 4,600 operators.

**Aircraft data includes:**

- Registration
- Type
- Serial/fuselage number
- Manufactured & delivered date
- Power Unit
- Mtow
- Config
- Remarks
- Plus full contact & address details for airline



[www.flightglobal.com/shop](http://www.flightglobal.com/shop)

Call: +44 13 7385 1882 Fax: +44 13 7185 1808



Flightglobal



**The latest training aids available for the aviation professional**

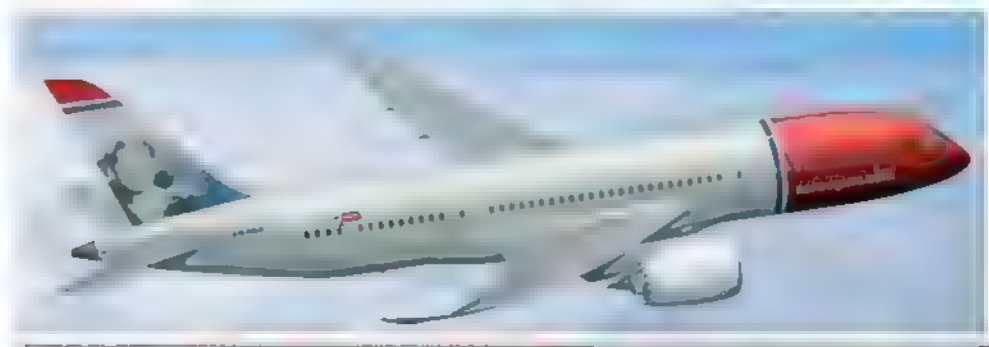
## B787 Pilots For Norwegian

Aircrew recruitment provider Rishworth Aviation has been selected to source Boeing 787 Dreamliner pilots for rapidly-expanding European carrier Norwegian. The carrier intends to start long-haul operations in 2013, using the aircraft to link Oslo to New York and Bangkok. In 2010 it announced it was considering up to 15 intercontinental destinations from Scandinavian capitals.

The company has firm orders for six B787s, with the first three due for delivery in

2013, two in 2014 and one in 2015.

For eligible pilots, the course to obtain a 787 Dreamliner type-rating takes 24 days, although a current type-rating on other Boeing types can reduce training time by up to eight days. To qualify for a shortened course, applicant pilots must be current on a Boeing fleet with a valid PC and three landings in the last 90 days. Training for Norwegian will be undertaken at a Boeing Training Centre in Seattle or at London Gatwick. (Photo Boeing)



## IT Apprentices at British Airways

The first wave of IT apprentices have joined British Airways (BA) and are already active members of the carrier's computer-based operations team at London/Heathrow Airport while studying for their BTEC Level 3 qualification in conjunction with Uxbridge College. They work in the 24/7 Service Support role and are mentored throughout the two-year scheme to provide developmental support and guidance while at work and at college.

BA plans to recruit more than 200 people into its apprenticeship programmes in 2012, which include schemes in IT, engineering and operations. This will add to the 340 students already undertaking apprenticeships, or completing college courses in preparation for beginning them.

## Boeing Expands in China

Boeing is expanding its presence in China, with a new manufacturing facility in Tianjin. The company is also investing in research and development in the country to develop new aircraft models for the Chinese market. This expansion is part of Boeing's global strategy to increase its market share in Asia.



## Bombardier Opens Doors to Schools

In June, the Belfast, Northern Ireland facility of Bombardier Aerospace hosted local schools during a week of special events for a joint government/industry initiative

designed to update perceptions of manufacturing in the UK. The week's programme was adapted from Bombardier's regular educational outreach across Northern

Ireland, which focuses on science, technology, engineering and maths (STEM). Around 70 employees participate in the company's outreach as STEM Ambassadors.



## IndiGo Selects CTC

IndiGo, one of India's fastest-growing low-cost carriers, has contracted the training of its future captains to training organisation CTC Aviation Group Limited (CTC). The airline will also be upgrading carefully-selected first officers to command positions.

CTC says it will deliver an intensive command skills development programme

by providing a full portfolio of simulator and ground school training courses. Comprising a four-day ground school followed by 12 simulator details prior to returning to the line for a continuous development programme, the course has been fully tailored to incorporate IndiGo's standard procedures, documentation and company culture. (Photo CTC)

# FLYING TIME AVIATION

Flight Training for Career Pilots

## Integrated Flight Deck Programme

£59,950

All Inclusive\*

Pay monthly

\*Terms and conditions apply

+44 (0)1273 455177 WWW.FLYINGTIME.CO.UK  
CAA REGISTRATION No. OCPI069 UK/FTO - 313



## JULY ISSUE OUT NOW

### FEATURING:

- T-50 – Russia's Rising Star
- Last Tornado F3s
- Bristol 170
- Airside in Milan
- Lancaster Bomber

### AND MUCH MORE!

July issue available NOW from **KEY PUBLISHING** and all other leading newsagents

**ALTERNATIVELY, ORDER DIRECT:**

Free P&P\* when you order online at  
**www.keypublishing.com/shop**

\*FREE P&P\* add on UK and BPO orders up to a value of £19.99  
EU £1.99, USA £2.99, ROW £3.99. Postage charges may vary depending on total order value.



OR



Call (UK) **01780 480404**  
(Overseas) **+44 1780 480404**  
Lines open 9.00am - 5.30pm



Also available on



App Store

Available on the

App with FREE ISSUE £2.49 IN APP ISSUES £3.99\*

\*App prices subject to change





## Last Flight For Air Southwest Dash 8

Bombardier Dash 8-311, G-WOWA (c/n 296), first flew with Lufthansa CityLine (as D-8KIS) in 1992. After a short stint with Schreiner Airlines (as PH-SDG), the aircraft entered UK service in 1997, (as G-BRYS) with Brymon Airways. This later became part of British Airways CityExpress and when the company closed its base at

Plymouth City Airport in 2003, the airframe continued to serve with local start-up carrier Air Southwest (as G-WOWA). Plymouth's short runway and frequent bad weather made it a challenging airfield to operate from, and crews appreciated the Dash 8's excellent handling characteristics and short field performance. Some of them continued to fly 'WA' right up until her retirement by Air Southwest's new owners, Humberside-based Eastern Airways.

By early 2012 the other four members of the Air Southwest fleet had been returned to their lessors, leaving G-WOWA as the last Dash 8-300 on the British register. On March 26, 2012, she operated her final revenue service – Eastern Airways' flight T34502 from Bristol to Aberdeen via Leeds Bradford. After arriving in Aberdeen with a full passenger load, she was then flown empty to Humberside to await collection by her new owner, Canadian regional carrier Air Inuit.

For the operating crew, Captain David Hoy and First Officer Oliver Bailey, the final landing in Humberside was a bitter sweet end to an era. They were not only saying goodbye to a much-loved aircraft, but also to the last remnant of Air Southwest and a long heritage of de Havilland operations from Plymouth City Airport. (Photo via Oliver Bailey)



## Record Before You Fly

A professional grade recording studio has been installed in Virgin Atlantic's Clubhouse at London/Heathrow Airport because – according to the carrier – “so many top class musicians and creative professionals fly with the airline. Composers who think of a new tune or need a last-minute radio edit to their latest single whilst waiting for their flight can rush to

the studio and record it immediately rather than running the risk of forgetting it.” The Virgin Atlantic Avid Suite claims to offer the industry standard professional digital and editing and mixing system Pro Tools. The Edit Suite has been custom-designed and built exclusively for the Clubhouse by Guy Wilson of AKA Design in London. (Photo Virgin Atlantic)



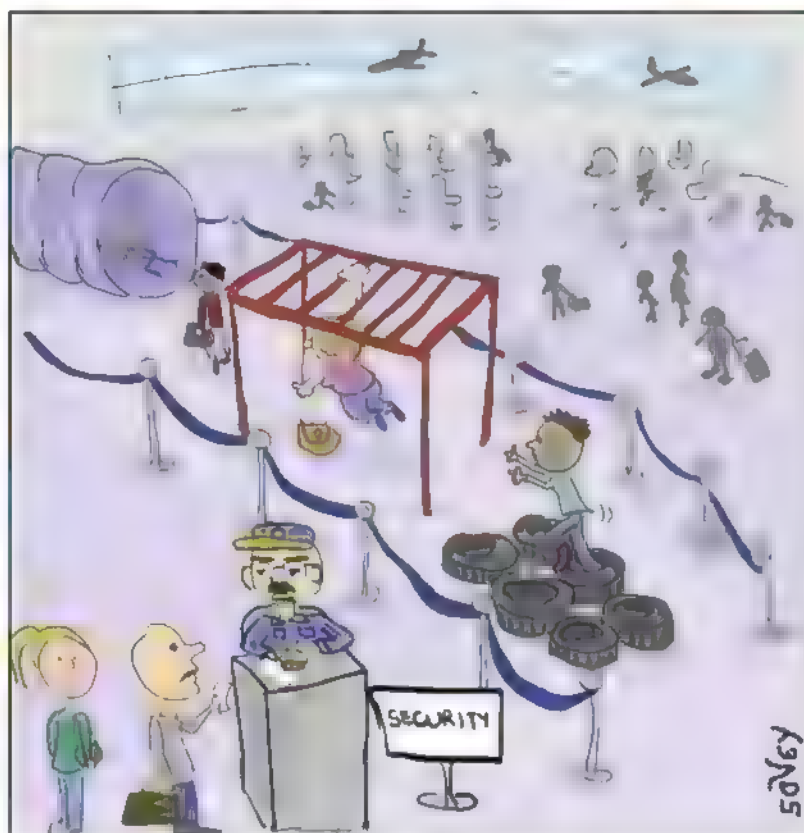
## British Airways to Your Door

A new British Airways' television advert, which shows a Boeing 777 passing through the streets of London to drop off spectators at the Olympic stadium, has already been seen by millions worldwide. Now, an interactive version – Take a Plane Down Your Street – which can be viewed on <http://taxi.ba.com> with viewers inputting their own address or postcode so that the aircraft travels past their home. One clip shows a cockpit view of the chosen street, another shows the view from a passenger window, and the third shows the nose of the aircraft travelling past homes.

The advert can also be accessed via the British Airways Advantage Facebook page and has already become an Internet hit, as more than 100,000 people have already viewed their own customised version.

Information  
for the  
traveller.

## Cartoon of the month



*"Or you can opt out and go through the MRI instead."*

## Transatlantic Junkers



Organisers of enthusiasts shows and events worldwide are invited to submit relevant details for inclusion in this listing. Free of charge – address correspondence to the editorial department or visit our website at [www.airlinersworld.com](http://www.airlinersworld.com)

**Jul 14/15**  
Aviation and Transport Fair, the Visitors Centre,  
Manchester Airport, UK [www.fairmanchester.com](http://www.fairmanchester.com)

**Jul 16-22**  
Gur J of Aviation Artists 42nd Annual Summer Exhibition,  
Mal Galleries, The Mall, London. Susan Gardner  
Secretary/Administrator +44 (0) 1252 513123

**Jul 24-28**  
Airliners International 2012, Memphis, USA.  
[www.aiz2012memphis.com](http://www.aiz2012memphis.com)

**Sep 9**  
Berlin Aviation Enthusiasts Convention, Training and  
Conference Centre Berlin/Schönefeld Airport, Berlin,  
Germany. Contact Lutz Schönfeld Tel +49 (0)306765577  
f5 aviation and media.de [www.aviationandmedia.de](http://www.aviationandmedia.de)

**Oct 6**  
Vancouver Airline and Aviation Collectibles Show,  
Oakridge Centre Mall Auditorium, Vancouver, Canada.  
[www.vancouveraviationshow.com](http://www.vancouveraviationshow.com)

**Oct 6**  
26th Annual Airline and Collectibles Show, Delta Air  
Transport and Heritage Museum, Atlanta, Georgia, USA  
Greg Romanoski Tel: (001) 404 715 7886  
[greg.romanoski@delta.com](http://greg.romanoski@delta.com)

**Oct 11**  
Luton Aircraft and Transport Enthusiasts Fair, Vauxhall  
Recreation Club, Gipsy Lane, Luton, Beds, UK. Keith  
Manning Tel: +44 (0)1372 725063 (Eves)  
[londonair@bt.com](mailto:londonair@bt.com)  
[www.lutonaircraftfair.co.uk](http://www.lutonaircraftfair.co.uk)

**Nov 11**  
Heathrow Aircraft Enthusiasts Fair, Kempton Park  
Racecourse, Sunbury-on-Thames, Middlesex, UK. Keith  
Manning Tel: +44 (0)1372 725063 (Eves)  
[www.heathrowaircraftfair.co.uk](http://www.heathrowaircraftfair.co.uk)

**Nov 25**  
Aircraft Enthusiasts Fair and Model Show, Museum of  
Army Flying, Middle Wallop, Hampshire, UK. Mark Roberts  
Tel +44 (0) 1264 334779  
[mark@airshow.co.uk](mailto:mark@airshow.co.uk)

### Shows/Displays

**Jul 9-15**  
Farnborough International 2012, Hampshire, UK  
[www.farnboroughint.com](http://www.farnboroughint.com)

**Sep 11-16**  
ILA Berlin 2012, Berlin/Brandenburg Airport, Germany.  
[www.ila-berlin.de](http://www.ila-berlin.de)

**Sep 19-21**  
ERAA, Dublin, Ireland. [www.eraa.org](http://www.eraa.org)

**Sep 30-Oct 3**  
World Routes 2012, Abu Dhabi. [www.routesonline.com](http://www.routesonline.com)

**Oct 30-Nov 1**  
NBAA, Orlando, Florida, USA. [www.nbaa.org](http://www.nbaa.org)

**Nov 13-18**  
Airshow Zhuhai, China. [www.airshow.com.cn](http://www.airshow.com.cn)

**Dec 11-13**  
MEBA Dubai. [www.meba.aero](http://www.meba.aero)

Events are subject to change without Airliner World's  
knowledge. Please check details prior to travel

## Adults-Only Flights?

The results of a survey by European flight comparison site Skyscanner have revealed what people really want to find on their dream aircraft. Although the single most requested feature was capsule-style bunks, 26% wanted facilities to reduce noise and annoyance caused by flying families; 18% said sound-proof sections for children to sit in was their most desired feature, while 8% would like to see anti-

kick seats installed. Assisting passengers in their quest for relaxation, 'massaging chairs' took the fourth spot, followed by 'free use of iPads' in fifth place with 5% of the vote. A flight with a view was also a popular choice with almost one in 20 voting for transparent floors and ceilings that would offer greater visibility of the terrain below and the sky above.

"As a mother myself I am well aware of the stress that travelling with children can lead to – both for the parents themselves and those seated around them," said Skyscanner's Mary Porter. "I am not surprised that sound-proof sections and anti-kick seats scored so highly, and this confirms the findings of our previous survey that shows children on planes are a contentious issue."



## 'Flying' Competition



Coventry University played host to 'IT FLIES' In June – Merlin Flight Simulation Group's annual Aircraft Design and Handling Competition. Teams from universities throughout the UK, and one from the USA competed in the event at the Faculty of Engineering and Computing.

The event is not just an aircraft design exercise as all entries are 'flown' in Coventry University's state-of-the-art engineering flight simulator.

"This was a brilliant opportunity for students to produce a design which actually 'flew'," said Marion Neal, the Marketing Director from Merlin. "Competitions were originally judged on paper with no proof that the aircraft would ever be able to fly. It is so important that students appreciate the practical side of aerospace engineering and designing the aircraft of the future."

(Photo via Merlin Flight Simulation)

## Manchester ATC Tower

With the new Air Traffic Control Tower now taking shape at Manchester International Airport in the UK, Lee Holden has provided this image of the old ATC building from the early 1960s. Those with long memories will fondly remember the rooftop viewing area and

the ability (for an extra fee) to walk down the Domestic and International Piers for a closer view of the proceedings. For more images and information on the airport, the latest *Airliner Classics* – out now – includes a detailed history of its growth and development



Two Canadair CL215 1A10 water bombers, C FAYN (c/n 1105) and C FAYU (c/n 1106), transited through Prestwick Airport in Scotland in May on delivery to Turkey for summer duties. This example carried Buffalo Airways' titles. (Alan Marshall)

## Airport Watch Helps Police

Two protesters sparked alarm when they climbed over the perimeter fence at London/Heathrow Airport in June. They were spotted and immediately reported to the police by aviation enthusiasts who were members of the Airport Watch Scheme. Thanks to their timely intervention, the 'gentlemen' were apprehended before any disruption could be caused. Dawn Morley, the Communications Manager of SO18 Aviation Security at the airport would like to thank all the people who informed the police

"This is exactly the type of incident and response that the scheme was set up to promote, and I would like to stress once more that you should not underestimate the importance of your role at the airport," she said in a letter to all members. "Your actions led to the suspects being detained and arrested within four minutes. With the Olympics just around the corner, I would ask you to maintain that vigilance on our behalf, as our resources are likely to be stretched during the lead up to this busy period."

## Final Call... Ryanair Loses Fewer Bags

The IATA World Travel Guide has reported that Ryanair has lost fewer bags than any other airline in the world. The low cost carrier has lost just 1.3% of its passengers' luggage in 2006, compared with 1.5% for British Airways. The airline's success is due to its strict baggage handling procedures and its use of a single aircraft type, the Boeing 737. Ryanair's baggage handling process is highly efficient, with bags being loaded and unloaded quickly and accurately. The airline also uses a single type of baggage tag, which makes it easier for ground staff to handle the bags. Ryanair's success in reducing lost baggage is a testament to its commitment to customer service and its focus on operational efficiency.

## Water Bombers Visit Prestwick



# Airliner World

## RE-PRINTS

Custom re-prints of features available for use as:

- Press Pack Inserts
- Sales Promotions
- Company Reports and more...

Tailored to your specific needs, re-prints can showcase your company, products or services in association with the leading civil aviation magazine

For further information call Andy Mason:

Tel. +44 (0) 1780 755131

E-mail: [andy.mason@keypublishing.com](mailto:andy.mason@keypublishing.com)

## Manchester Airport Aviation & Transport Fair

Fair entrance £2  
under 14s



*"Under the wings of Concorde"*

Manchester Airport Runway Visitor Park

Sat 14th & Sun 15th July

Over 200 tables selling everything  
"Aviation & Transport"

Entrance to RVP car park  
charges apply 1/2 Price  
parking discount  
available online  
Arrive by public transport  
and get into RVP



[www.tasmanchester.co.uk](http://www.tasmanchester.co.uk)

NEW! 30th ANNIVERSARY SOUVENIR ISSUE

## Falklands

UNTOLD STORIES OF THE WAR IN THE SOUTH ATLANTIC



VULCANS  
OVER THE  
FALKLANDS

THE FATE  
OF THE TASK  
FORCE

ARGENTINA'S  
ATTACK ON  
GIBRALTAR

JUST  
£6.99!

Created by the team behind *Britain at War* magazine, the *Falklands 30th Anniversary Special* is a 132-page bookazine which tells the story of the Falklands War as never before.

### FEATURES INCLUDE:

#### A CHRONOLOGY OF CONFLICT

A day by day timeline of events throughout the conflict between 1 May 1982 and the Argentine surrender.

#### MAINTAINING THE FIGHT

The massive logistical effort required to send an army and a fleet to the Falkland Islands, and in particular the little-known air bridge which flew supplies via Ascension Island

#### VISITING THE FALKLANDS' BATTLEFIELDS

Well known for his work on the battlefields of the First World War, Jon Cooksey presents his own look at touring those of the Falklands - a mixture of the well-known locations to the rarely seen sites

Available NOW exclusively from **AMSO** in the UK and other leading newsagents around the world



FREE P&P\* when you order online at  
[www.keypublishing.com/shop](http://www.keypublishing.com/shop)

UK and 48-PO orders only up to a value of £10.00 £12.11 99, USA  
+2.99 ROW £3.99. Postage charges may vary depending on local  
\*over value



Call (UK) 01780 480404  
(Overseas) +44 1780 480404  
Lines open 9.00-5.30, Monday-Friday



# AIR SAFETY

Reports and details of recent incidents.

## Nosewheel Failure at Entebbe

The nosewheel of this United Nations Humanitarian Air Services' Let-410UVP-E20, ZS-ATB (c/n 892340), retracted on its take-off run from Entebbe, Uganda on June 11, 2012. The aircraft was bound for the Democratic Republic of Congo with three UN officials on board. No one was injured in the incident but it took four hours to rectify the problem and remove the aircraft from the runway. Entebbe's main runway remained open throughout. (Geoff Jones)



## New Safety Checks

Following the fatal crash of a Bhoja Air Boeing 737-200, AP-BKC (c/n 23167), on April 20, the Pakistan Government has ordered new safety inspections for all privately-run Pakistani airlines. The country's Defence Minister Chaudhry Ahmed Mukhtar told state TV that aircraft operated by private airlines will be inspected one by one, and any that fail, will be grounded. Airliners currently in operation will be allowed to fly as they await inspection.

## Safety Compromise?

"Proposed EU rules on the working hours and conditions for pilots and cabin crew must be improved or safety could be at risk," said the UK's Transport Committee, following the publication in June of its report into the European Aviation Safety Agency's (EASA) draft proposals on flight time limits (FTL).

During its investigation the Committee heard from pilot and crew representatives "about a culture of under-reporting and that it was often a 'better option' not to report fatigue. The British Airline Pilots Association (BALPA) said that pilots are 'fearful' of disciplinary action if they report fatigue, the union - Unite - stated that such reports are 'discouraged' and the European Cockpit Association (ECA) explained that fatigue is 'significantly under-reported' as a result."

The Committee's Chair, Louise Ellman MP said: "Currently, the UK implements stricter flight time regulations than some other European countries.

"But under the new rules proposed by EASA, the UK would not be able to have its own regime. As many as 43% of pilots have reported falling asleep involuntarily at some point whilst on duty while operating under the UK's current regulatory framework. This shows how fatigue is already an issue in aviation. Steps must be taken to address this. Current EU proposals risk making the situation worse by lowering the UK's current standards. A lowest common denominator approach to safety will not benefit passengers, airlines or crew."

## Flybe Line Operational Safety Survey

Regional carrier Flybe and the UK's air navigation service provider National Air Traffic Services (NATS) have announced a proactive, collaborative safety initiative called Flybe Line Operational Safety Survey (FLOSS). The project has been launched following an 18-month trial study into Altitude/Flight Level Compliance activity. During which time observations were made into best practice on Flybe's Bombardier Dash 8-Q400s.

## 'Lost' An-2

The Antonov An-2 that went missing on June 11 (see panel) apparently took off on an illegal flight following an alleged drinks party. Onboard was the town's police chief and a number of his senior inspectors and the only way of knowing who was onboard was by the number of cars left behind!

DATE	REG	TYPE	OPERATOR	FAA/CAA	LOCATION	DETAILS
May 23	04 blk	D704	An 30	Russian Air Force	Czech Republic	Written off in runway excursion on landing
May 25	D-FAAF	3125	Bo 208	Skyline Aviation	France	Forced landing after engine failure
May 26	C-FGBF	168	DHC 2	Cochrane Air Service	Canada	Flipped over on lake landing
May 30	B-164BT	30607	B747-4SEF	EVA Air Cargo	USA	Struck tail of Embraer on taxi
May 30	N834AT	KAL003	ERJ 135XL	American Eagle	USA	Tail struck by wing of B747
Jun 1	PK-CJV	24689	B737-4YD	Sriwijaya Air	Indonesia	Runway excursion on landing
Jun 2	5Y-3000	22540	B727-221F	Allied Air Cargo	Ghana	Crashed after runway excursion on landing
Jun 3	5N-RAM	53019	MD-45	Dom Air	Nigeria	Crashed into town on approach
Jun 3	N14447	826 B010	P 2V Neptune	Neptune Aviation Services	USA	Crashed during fire fighting mission
Jun 3	N355MA	726-729	SP-2H Neptune	Menden Air Corp	USA	Stranded with one mainwheel retracted
Jun 6	CX-LAS	AC 482	SA227 Metro III	Air Class Lineas Aereas	Uruguay	Missing en route
Jun 7	N950KA	730	PC-12	Worldwide Helicopters	USA	Crashed shortly after take-off
Jun 7	B00000	0017	Learjet 60	Performance Aircraft	USA	Damaged after veering off runway on landing
Jun 8	N174BH	12038	PA-31-325	Family Celebrations	USA	Missing en route
Jun 9	OK-KFM	615	ATR 42-500	CSA	Czech Republic	Destroyed by fire in hangar
Jun 10	UR-SKD	810721	Let 410UVP	Ukrainska Shkola Pilotov	Ukraine	Crashed during rainstorm
Jun 10	V2-LGH	242	Dash 8-311	LIAT	Antigua	Destroyed in hangar fire
Jun 11	RA-40312	1G-221-48	An-2	Avi Zee	Russia	Disappeared after illegal flight
Jun 12	C-FTTW	1681	HS748 Srs 2	Wasaya Airways	Canada	Caught fire on ground and burnt out
Jun 13	EJC3381	170M07	MW MU-17-1V	Colombian Army	Colombia	Crashed on test flight
Jun 16	G-DRFC	007	ATR 42-320	Blue Islands	Jersey	One main gear retracted on landing
Jun 18	N826JH	RK-70	Beechjet 400A	Private	USA	Overran runway on landing
Jun 20	N82979	32979	B767-381ER	All Nippon Airways	Japan	Substantial damage after hard landing
Jun 20	9Q-CIT7	193	Gulfstream 1	International Trans Ari	DRC	Destroyed in landing accident
Jun 21	A-2708	10546	Fokker F27	Indonesian Air Force	Indonesia	Crashed on approach to land
Jun 22	N508GT	LJ-1790	B90GT King Air	OZ Gas Aviation	USA	Crashed after hitting aerial
Jun 24	EJC-1131	1199	Ce208B	Colombian Army	Colombia	Crashed en route

# Win



A YEAR'S  
SUBSCRIPTION  
to **Airliner  
World**

**FOR THE CHANCE  
TO WIN A ONE-YEAR  
SUBSCRIPTION TO  
AIRLINER WORLD  
SIMPLY WRITE AN  
AMUSING CAPTION TO  
THIS PHOTOGRAPH**

Send your CAPTION, name, address, telephone number and e-mail (if you have one) to: Caption Competition, *Airliner World* August 2012, Key Publishing, PO Box 100, Stamford, Lincolnshire, PE9 1XQ. Alternatively, you can submit your entry by e-mail, addressing it to [barry.woods-turner@keypublishing.com](mailto:barry.woods-turner@keypublishing.com) with August 2012 Caption Comp in the subject box.

Closing date for entries is 15:00 GMT on September 20, 2012. The winner will be notified no later than September 29, 2012.



**Caption  
Comp**



Thanks to everyone who entered the March 2012 competition. We had some very good responses to this picture, which kept the competition judges amused for a long time. Congratulations go to Chris Belton of Bingham, Nottingham who was selected as the winner.

**"Testing for the new 797 'Dirigibleliner' is going well."**

Other notable entries:

**"By next week this lot could all be biofuel."**

**"I think I'm going to need a bigger truck."**

**"I think I'm going to need a bigger truck."**

**"I think I'm going to need a bigger truck."**

**NEW MILITARY AVIATION WEBSITE**

## AirForces

**FREE  
24 HOUR  
TRIAL\***

From the **AirForces Monthly News Team**, it's the **NEW** online military aviation news channel and reference resource. Available by subscription only, members receive access to exclusive online content, including:

**Breaking  
News  
Reports**

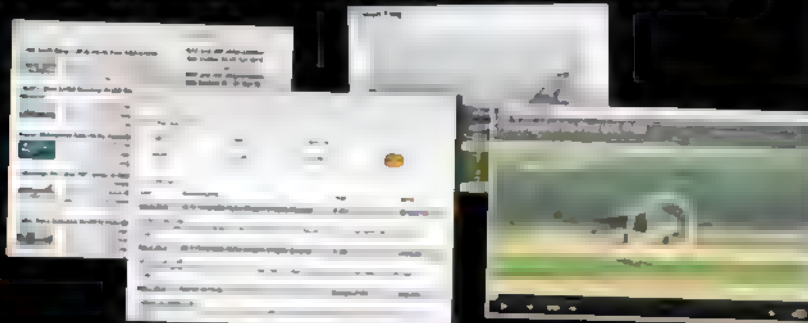
**Searchable  
Attrition  
Database  
Going Back  
to 2000**

**Insider  
Reports,  
Video  
and Photos**

**Exclusive  
Articles and  
Features**

**Combat  
Ops,  
Exercises  
and Training**

**Air Force  
Reports and  
Independent  
Surveys**



Access to all this exclusive content starts from £4.99, with further discounts on longer term subscriptions. What's more, current **Airliner World** subscribers receive further special discounts with monthly subscriptions starting at £2.49 per month.

To take advantage of this offer, register now at:

**[www.airforcesdaily.com](http://www.airforcesdaily.com)**

**IT'S MILITARY AVIATION AT YOUR FINGERTIPS!**

\*Terms and conditions apply, see website for details



**RELAX!**  
It's not that  
Mysterious Review  
order on Amazon,  
Kindle, Barnes &  
Noble, or RoseDog  
Books.  
Search:maodull

**GUIDE**  
FOR  
STRESS-REDUCED  
FLYING  
DANIEL M. MATHIAS

# Airliner World

## To advertise in the classified section

please call **Charlotte Brewster** on **01780 755131** or email  
[charlotte.brewster@keypublishing.com](mailto:charlotte.brewster@keypublishing.com) for more details

## FLIGHTDECK ACTION

FLIGHTS IN THE COCKPIT - YOU'RE INVITED!  
**COCKPIT VIDEOS**  
HD - WIDESCREEN - MULTIPLE CAMERAS - BLU-RAY



[www.VikingAviationPhoto.com](http://www.VikingAviationPhoto.com)

## New Photo Book on VARIG Electras



Only available from [HenryTenby.com](http://HenryTenby.com)

### Boeing 720 Last Flight



### ICE PILOTS SEASON TWO



[AirlineHobby.com](http://AirlineHobby.com) / [HenryTenby.com](http://HenryTenby.com)

## Aviation Emporium

Main Terminal, East Midlands Airport, Derby, DE74 2SA

**Tel: 01332 818435**

[aviationemporium@gmail.com](mailto:aviationemporium@gmail.com)

Corgi Military, Inflight 200's, Gemini Jets 1:200 and 1:400,  
Dragon Wings 1:400, Herpa 1:500's and many more makes.  
We have many books and magazines in stock.

Pop in and see us.

Open everyday, located opposite the check-in desks

## AirwaySim Online Airline Management Simulation



## VINTAGE AIRLINER DVDS

£17.95 each plus P. & P.



## [www.avionvideo.com](http://www.avionvideo.com)

For full details, video clips and photos of all our DVDs


Buy on-line, by phone or post. Ask for full-colour leaflet.

P & P: UK & Worldwide 1 DVD - £1.50 2 or 3 - £2 4 or more - free!


Mastercard/Visa/Amex/Delta/Maestro/Switch/Solo Tel: 01822 660378 (9am-6pm)

Cheques/P.O.s (UK only) AVION VIDEO c/o P. Laurel Cottage, Chilton, LIFTON, PL16 0HS

**ADAM Jets**  
[www.ADAMJets.com](http://www.ADAMJets.com)  
 Florida 770366 Miami Florida 35177 USA Tel: 001305 233 1111



[www.AIR400MODELS.com](http://www.AIR400MODELS.com)  
**Die cast plane models**  
 scale 1:72, 1:200, 1:400 and 1:500  
**Metallflugzeugmodelle**  
 Masstab 1:72, 1:200, 1:400 und 1:500



**Die-cast models in scale 1:500, 1:400, 1:200**  
[www.aviation-center.eu](http://www.aviation-center.eu)  
 Aviation Center Berlin



**AIR-BRITAIN NEWS MONTHLY**  
 Registration news & changes  
 worldwide £38pa (uk)  
 Discounts of upto 1/3rd off  
 Air-Britain published books  
**QUICK REFERENCE BOOKS** from  
 £6.95 include Airline Fleets, BizJets  
 & UK register. 15+ new books per  
 Members only e-mail Info group  
[www.air-britain.com](http://www.air-britain.com)



**Model aircraft**  
[airspowers.com](http://airspowers.com)



**AVIATION RETAIL DIRECT**  
 Aircraft models  
 Books DVDs  
 10 Sutton Court Road  
 Hillingdon, Middlesex  
 UB10 9HP, Tel: 01895 231 707  
 BAA Academy, Newall Road  
 Heathrow Airport  
 TW6 2AP, Tel: 0208 759 8759  
[www.AviationRetailDirect.com](http://www.AviationRetailDirect.com)



**TO ADVERTISE IN OUR  
 WEB DIRECTORY SECTION**  
 please call **CHARLOTTE BREWSTER** on **01780 755131**



**From Flying Boats to the A380!**  
**Over 175 Silk-Screened T-shirts!**  
[www.skyshirts.com](http://www.skyshirts.com)  
 All at USA \$ Prices!



**FLIGHT COCKPIT**  
 by justplanes.com

**A fantastic Aviation series**

**All over the world our Cockpit Blu-rays are #1 sellers!!**

 <b>B737-800</b> <b>B777-200LR</b> <b>B777-300ER</b> <b>7 destinations!</b> <b>4h35mins \$30</b>	 <b>A350-900</b> <b>B737-700</b> <b>B737-800</b> <b>7 destinations!</b> <b>3h41mins \$30</b>	 <b>CRJ-900</b> <b>CRJ-705</b> <b>Q-400</b> <b>4 destinations!</b> <b>4h28mins \$30</b>	 <b>A320neo</b> <b>Swire to</b> <b>San Francisco</b> <b>Transatlantic</b> <b>4h16mins \$30</b>	 <b>B777-300ER</b> <b>Toronto to</b> <b>Hong Kong</b> <b>Peiwei</b> <b>4h22mins \$30</b>
---	--	---	---	--

**Visit our website for more than 200 other programs of nearly 250 airlines!**










Airport DVDs!  
 Our brand new  
**MIAMI AIRPORT**  
 10 years!  
 Double DVD  
 Nearly 10 hours  
 Filmed 1993-2012



...nearly 75 years of development, innovation and change.



# The Final Countdown

**A**fter a very uncertain three years, the British national carrier is set to continue to struggle financially, British Airways (BA) and Spanish national carrier Iberia, the Castle Donington-based airline's future has finally been determined. The airline, like its parent company, is set to cease to exist. The airline's long and proud history will come to an end, and its title and brand will cease to exist.

When *Airliner World* ran a feature celebrating BA's 70th anniversary in November 2008, there was one overriding question: when would Sir Michael Bishop decide to sell his controlling interest in the company?

This Douglas C-47B-OK military transport aircraft was acquired by Cambrian Airways in 1957 and re-registered G-ARST. It was later acquired by Derby Aviation and, along with Douglas C-47B-OK and C-54-OK, was used on the company's operations in Guyana in June 1966.

The aircraft was acquired by Derby Aviation in August 1957 and re-registered G-ARST (c/n 1188). Seen here minus its engines, the aircraft was stored at Knebworth Airfield for a period in the early 1960s before being scrapped.



and to whom? Speculation at the time

**"...THERE WAS  
ONE OVERRIDING  
QUESTION: WHEN  
WOULD SIR  
MICHAEL BISHOP  
DECIDE TO SELL  
HIS CONTROLLING  
INTEREST IN BMI AND  
TO WHOM?"**

preparing London's  
Heathrow on a sunny

the company's large take-off and landing







in the hope of an economic recovery. Ironically, history will show he acted rather quicker than they thought, and shortly after the *Airliner World* edition was published, bmi announced that Sir Michael had decided to sell to Lufthansa.

### Seven Decades in the Making

British Midland International - bmi can trace its roots back to the formation of Air Schools Ltd in 1938, a reserve flying school established at Burnaston, near Derby. A second unit was opened at Wolverhampton soon afterwards and between them they trained some 14,000 pilots and navigators during World War Two. The school continued after the end of hostilities, but it found it had to diversify to survive. So it started flying special charter flights, the first of which took-off on August 21, 1947 when a Miles M-38 Messenger transported three passengers to the famous Isle of Man TT Races. As demand for charters grew, Air Schools Ltd became Derby Aviation on February 16, 1949 and it re-organised its Burnaston operations to include *ad hoc* passenger and cargo charters

Former Lufthansa Vickers Viscount 814 (D-ANOL, c/n 339) was acquired by British Midland Airways in January 1969 and re-registered G-AWXI. (Bob)

Canadair Argonaut C-4, G-ALHS (c/n 164), was acquired by Derby Airways in October 1961 and is seen here parked outside the company's facilities at Burnaston Airfield in April 1964.

and maintenance services. (A similar company, Wolverhampton Aviation, was established at Pendeford Airfield, but was later closed.)

Derby Aviation launched its first services with a fleet of two de Havilland DH 89 Dragon Rapides, a Miles Aerovan, a M-65 Gemini 1A and the Messenger. It started seasonal charter services to Jersey in 1953 which proved so popular they continued during the following summer and were upgraded in 1955 with the arrival of the company's initial

Douglas DC-3 and two former West African Airways M-60 Marathons. Derby Aviation's first international connections followed in 1956 with holiday flights to Ostend, Belgium - and later it added services throughout mainland Europe.

On March 15, 1959 Derby Aviation was renamed Derby Airways, and that summer its network was expanded to include charter links from Birmingham, Gatwick and Manchester while at the same time it launched its inaugural scheduled domestic services. In October





**Top** - In the early 1970s British Midland Airways acquired its first jet aircraft, including Boeing 707-321, G-AYBJ (c/n 17597).

**At right** - This British Aircraft Corporation One-Eleven, G-AXLL (c/n 193), operated for British Midland Airways for just three years before being sold to Transbrasil as PP-SDT in May 1973.

**Below** - This Handley-Page HPR.7 Herald, G-APWA (c/n 149), was leased from the manufacturer for the summer of 1966 and is seen parked on the apron at Jersey Airport.

1961, its fleet of DC-3s was augmented by three former British Overseas Airways Corporation (BOAC) Canadair Argonauts as the company established itself as one of the pioneers of the rapidly-growing package holiday industry. The Argonauts saw heavy use during the summer months, and when demand slowed during the winter they undertook freight charter work.

#### **A New Name and Home**

On October 1, 1964, Derby Airways became British Midland Airways (BMA) and moved its operations from Burnaston to the recently-opened East Midlands Airport at Castle Donington. The airline was the facility's first resident and its revised branding reflected its association with the region as a whole rather than simply Derby. In the years that followed,

the company was able to expand its network from Castle Donington, thanks to the reliability of the Argonaut fleet. However, by the end of the 1960s these had been retired and replaced initially by Handley Page Heralds (its first turboprop model) and, from January 1967, a fleet of Vickers Viscounts.

In 1968 British Midland Airways was purchased by investment and banking group Minster Assets. The airline's first jet airliners arrived in early 1970 in the form of the British Aircraft Corporation (BAC) One-Eleven and, for its long-haul services, the Boeing 707. Both types were operated with limited success. The One-Elevens were used initially on inclusive tour (IT) flights to European destinations but were retired in 1972. The 707s were leased to other carriers through British Midland Airways >>

**"THE 707s WERE LEASED TO OTHER CARRIERS THROUGH BRITISH MIDLAND AIRWAYS LEASING - EARNING THE COMPANY A QUEEN'S AWARD FOR EXPORT ACHIEVEMENT."**







Leasing – earning the company a Queen's Award for Export Achievement.

Instead the airline concentrated on the scheduled market, offering a mix of domestic and international connections from its East Midlands' hub and from Gatwick Airport. These were flown by its Heralds and Viscounts, which from 1976 were increasingly supported by DC-9s. The US-manufactured jet became the mainstay of its fleet until the end of the following decade, when it was replaced by the 737.

BMA's ownership changed again in 1978 when a consortium of investors, including some of the airline's senior executives, took control of the business. They included directors Stuart Balmforth, John Wolfe and Michael Bishop, who was starting a 30-year involvement in the day-to-day running of the company. The following year BMA carried one million passengers for the first time with the help of a route swap with BA – links from Birmingham to Brussels and Frankfurt were transferred to BA in return for which BMA took over a number of the then national carrier's domestic services. These included its first routes into the UK's primary international gateway, London/Heathrow, which eventually became its largest base.

During the 1980s BMA became one of the leading operators in the UK market. It established a new business on the Isle of Man, Manx Airlines, in partnership with British and Commonwealth Shipping in 1982 and further expanded the following year by taking a majority stake in Scottish carrier Loganair.

In 1986, the company decided to drop 'Airlines' from its name and adopted a new corporate livery. This featured a darker blue upper fuselage, with a deep-grey lower half, and a red cheat line. A revised logo of a stylised, red 'BM' crowned by a diamond shape was also introduced. Alongside its rebranding, BM introduced its first frequent flyer programme, Diamond Club, and added access to dedicated lounges to its premium product.

By the end of the decade, BM had

formed a strategic partnership with SAS Scandinavian Airlines, a precursor to it becoming a member of the Star Alliance group. SAS initially acquired a 24.9% stake in BM during 1989 for a reported £25 million; its shareholding was increased to 35% in 1992 and later to 40%.

**TO COUNTER THE COMPETITION FROM BUDGET AIRLINES SUCH AS EASYJET AND RYANAIR IN THE UK MARKET, A NEW LOW-COST SUBSIDIARY, 'BMIBABY', WAS ESTABLISHED IN 2002**

### A Decade of Achievements

Establishing itself as a major challenger to both UK and European airlines, in 1992 BM became the first to offer a vegetarian meal option for passengers on domestic services. The following year it was the first European carrier to offer a separate Business Class cabin for its premium passengers, and in 1995 it gave its customers the option to book flights and pay for them via the Internet. The company then upgraded its fleet, signing a contract with European manufacturer Airbus for 20 A320 short-haul aircraft in March 1997. The deal, valued at \$1 billion, would see the new Airbuses replacing BM's older 737s. A dozen of the jets were to be leased from International Lease Finance Corporation, while the rest were bought outright.

British Midland acquired Douglas DC-9-15, PH-DNB (c/n 45719) from KLM-Royal Dutch Airlines. It was re-registered G-BMAG upon joining British Midland. Bob O'Brien Collection

Below - This Short SD360-100, G-BMAR (c/n 3633), was delivered to British Midland in March 1984 and spent 13 years with the carrier. Bob O'Brien Collection

Bottom - Former Malaysia Airways Fokker F27-200 (9M-AML, c/n 10231) was leased by British Midland from Air UK between 1982 and 1985. John O'Brien Collection





The first A321-231, G-MIDA (c/n 806), was delivered on March 31, 1998 – and by the time of BM's later acquisition by IAG, the airline was operating eleven A319s, seven A320s and seven A321s with three additional A321s on order.

As the decade drew to a close, SAS sold 20% of its stake in BM to the German national carrier, Lufthansa, on condition that the British airline joined the Star Alliance – and so, on July 1, 2000, it joined the global aircraft grouping as its 13th member, enabling it to offer passengers connections throughout the world. This was followed by the launch of its first long-haul flights to the US, flying services to Chicago, Las Vegas and Washington from Manchester.

Another rebranding exercise led to the introduction of the stylised title

'bmi – british midland' in January 2001 – which was shortened to just 'bmi' the following year. Aberdeen-based Business Air, which was created at Aberdeen's Dyce Airport in 1987, was acquired by bmi later in 2001 and re-named 'bmi Regional'. To counter the competition from budget airlines such as easyJet and Ryanair in the UK market, a new low-cost subsidiary, 'bmibaby', was established in 2002 (see separate boxes).

### Transatlantic Routes

British Midland had been one of the leading players seeking to break down restrictive bilateral agreements over flights across the Atlantic. It was frustrated for more than three decades by the old Bermuda 2 agreement between the UK and US Governments,

Former London City Airways de Havilland Canada Dash 7-110, G-8DAW (c/n 110), was transferred to British Midland Airways in 1990. Bob O'Brien Collection

### CHANGING NAME

1938	Air Schools Ltd
1949	Derby Aviation Ltd
1959	Derby Airways Ltd
1964	British Midland Airways Ltd
1986	British Midland
2001	bmi british midland
2002	bmi
2010	British Midland International bmi

Left • This Boeing 737-53A was sub-leased by British Midland Airways from SAS. The aircraft was re-registered G-OBMZ in September 1993, and flew with the carrier for seven years. Bob O'Brien Collection

Below • British Midland added this single Fokker 100, G-BVJC (c/n 11497), to its fleet in December 1994 and it remained with the carrier until May 2005 when it was sold.

which limited transatlantic access to Heathrow to just two carriers from either country. In the UK, BA and Virgin Atlantic Airways were the beneficiaries, leaving it out in the cold. However, on March 30, 2008 the long-awaited 'open skies' agreement between Europe and the US came into force, allowing free access to Heathrow, provided that slots were available at the capacity-constrained airport. It was a day that bmi and Sir Michael Bishop had campaigned long and hard for, but as major US carriers such as American Airlines, Continental Airlines, Delta Air Lines, Northwest Airlines and US Airways were launching new services from Heathrow, bmi was looking in the other direction, developing its network towards the East instead.

It focused on developing its medium-haul network, becoming the designated UK carrier to Saudi Arabia in 2005, and then significantly expanded its operations in Africa, the Middle East and the Commonwealth of Independent States (CIS) through the takeover of former BA franchisee British Mediterranean Airways, trading as BMED, in February 2007. The acquisition represented bmi's largest-ever expansion.

BMED's services in Africa, the Middle East and the CIS were incorporated into bmi's own schedules from October 28, 2007, and were joined a week later by a new connection to Cairo, Egypt. In all, the airline inaugurated flights to 17 destinations on its winter 2007 timetable. Speaking at the time of the company's acquisition of BMED, Sir Michael said: "The successful integration of BMED's network into bmi was completed with major operational efficiencies and improvements to schedules. Our decision to acquire BMED had enabled us to accelerate significantly our expansion into the medium-haul markets from Heathrow, where substantial growth opportunities exist."

### Ownership Questions

As bmi celebrated its 70th anniversary, speculation grew about its future ownership. On October 29, 2008 Lufthansa announced it was taking

>>







control after agreeing to buy a majority stake in the carrier for £223 million. When the German company first became a stakeholder in 1999, it agreed an option with Sir Michael to buy his stake if and when he decided to sell. He enforced the buy-out option in 2007 – but with valuations in the airline industry having slumped, and bmi reporting losses for the year of almost £100 million (blamed on higher fuel prices and the global economic downturn), Lufthansa held out for a better deal. After months of wrangling over the price, both parties finally agreed an out-of-court settlement that saw Sir Michael cancelling his option in return for a £175 million payout. In addition, Lufthansa paid a further £48 million for Sir Michael's 50%-plus-one-share holding, taking its ownership to 80%.

The European Commission's Directorate-General for Competition approved the takeover on May 14, 2009. However, with outstanding issues relating to bilateral route rights, the 50%-plus-one-share holding was placed into a British-based holding company, LHBD Holding, until these were resolved and Lufthansa could formally take direct control of bmi. For less than a year SAS remained the other shareholder, but keen to offload its stake, it sold its 20% of bmi to the German carrier on October 1, 2009 for \$38 million. Soon after the deal was completed, Lufthansa began looking at its options, which at the time ranged from total integration to a total sale. One of its first priorities was stabilising bmi's operations and putting its finances on a more even keel.

In November its parent company announced a restructuring of both mainline and bmi Regional's functions in an effort to suspend loss-making routes and adjust capacity. This included cutting nine aircraft from its fleet, including two flown by bmi Regional, and the suspension of routes from Heathrow to Amsterdam, Brussels, Tel Aviv, Kiev and Aleppo from the start of its 2010 summer schedules.

In April 2010 it was confirmed that bmi was returning to its former name of British Midland, but it stopped short of a full rebranding. Marketing material now carried the sub-branding 'British Midland International – bmi', but there would be no changes to aircraft liveries or uniforms. The move, ordered by the

British Midland was the first airline to launch services using the British Aerospace ATP, the manufacturer's replacement for the venerable HS 748. This example, G-BMYK (c/n 2003), was the second of the type to be delivered to the airline on May 31, 1988.

Above right • Manx Airlines leased this BAe 146-200, G-MANS (c/n E2088), from British Aerospace in May 1994, four months later it was sub-leased by British Midland. It is seen here wearing a basic Manx Airlines livery, but with British Midland titles on the fuselage side. (Both O'Brien Collection)

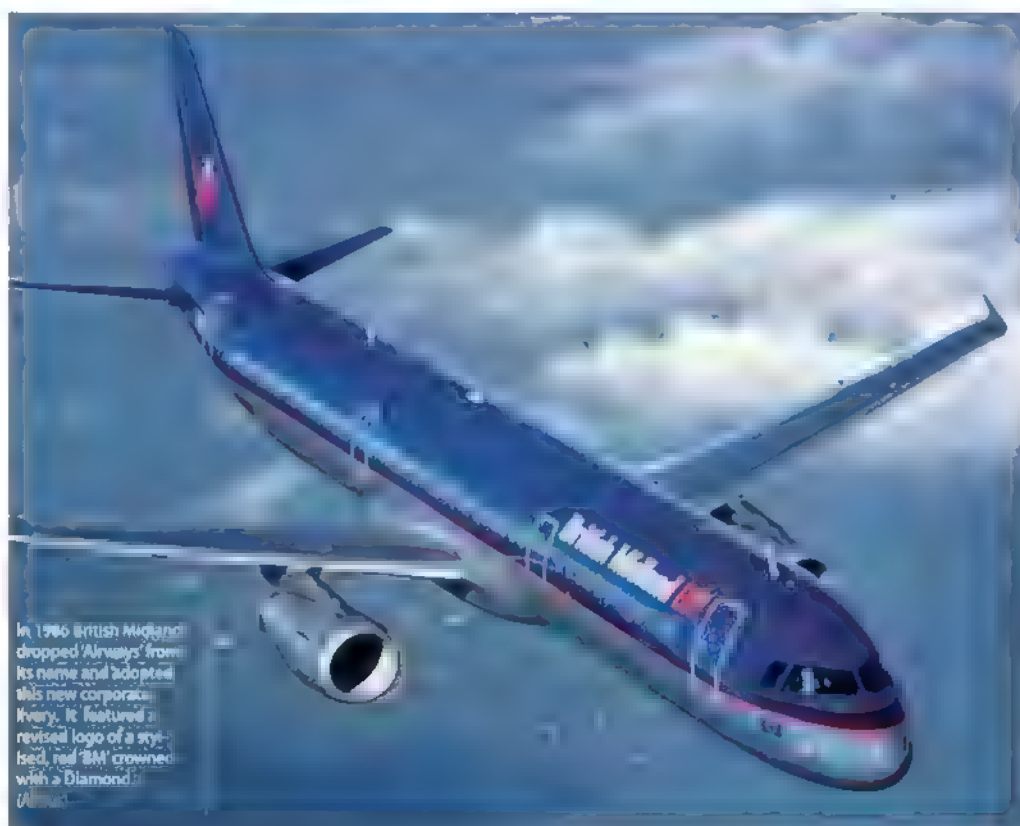
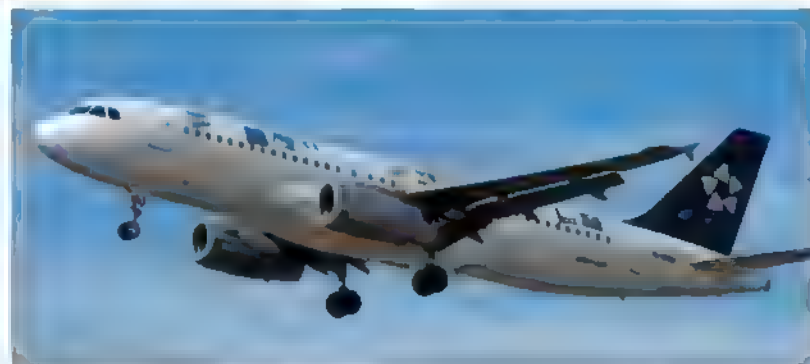
Right • The airline became Star Alliance's 13th member on July 1, 2000. To celebrate the event it painted this A320-232, G-MIDX (c/n 1177), with this special livery. (Key: Barry Woods Turner)

carrier's new German CEO, Wolfgang Prock-Schauer, came after research showed the bmi name was not easily recognisable in some of the markets it served, particularly the Middle East.

### New Owners Again

Unable to stem the financial losses of the British company, Lufthansa announced in September 2011 it was putting it up for sale. Press speculation indicated that Virgin Atlantic Airways had shown an initial interest in acquiring it, but by early November British Airways' parent, International Airlines Group

(IAG), announced that it had reached an agreement in principle to buy the ailing carrier. On December 12, Virgin Atlantic confirmed it had made a counter offer, believed to be around half that of IAG's, which was based on its claim that it would face fewer regulatory issues and so the deal could be concluded more quickly. By December 22, IAG had entered into contractual negotiations to buy bmi for £172.5 million – this included an option for Lufthansa to sell bmi Regional and bmi baby separately as neither was required by IAG. However, the final price would be reduced should



In 1980 British Midland dropped 'Airways' from its name and adopted this new corporate livery. It featured a revised logo of a stylised, red 'BM' crowned with a Diamond. (Allan)

# bmi**baby**

Earlier this year bmi**baby** celebrated its tenth birthday - but celebrations were extremely muted, with the carrier facing an uncertain future. On January 24, 2002 bmi announced it was forming a budget subsidiary to combat the growth of low-cost competition, particularly at its East Midlands Airport base. Just two

months later, bmi**baby** launched its first services using two Boeing 737-300s and a Fokker 70 transferred from the parent company's main and bmi Regional's fleets (see *Baby's Formula*, *Airliner World*, November 2010 issue, pg 30-34). In the past four years the subsidiary has struggled financially, reporting losses of

£100 million over the period. Its precarious situation has been exacerbated by the sale of parent British Midland International - bmi by Lufthansa to the International Airlines Group, which has resulted in the possibility of bmi**baby** being shut down. IAG has already introduced changes to the carrier's schedule, including the axing

of all its flights from Belfast City Airport and the cancellation of several rotations from Birmingham and East Midlands from early June. The situation became graver for the airline and its employees when IAG announced that all operations would cease on September 10 unless a buyer could be found in the meantime.

The Boeing 737 Classic has been the mainstay of the bmi**baby** fleet since it started operations in 2002. This example, G-ODSK (c/n 28537), is named Dragonfly Baby.



neither company be sold when the deal was concluded.

Despite this initial agreement, Virgin Atlantic's founder and President, Sir Richard Branson, pledged to fight on, urging European competition authorities to block IAG's move, stating that the group would be increasing its share of landing and take-off slots at Heathrow from 45% to 53% - claiming this was both unrealistic and anti-competitive. However, on March 30, 2012 the sale of bmi was approved, with the European Commission placing several conditions on the deal, including IAG giving up 14 daily slot pairs as well as carrying transfer passengers for rival airlines at the UK's main hub. Twenty days later, ownership was transferred from Lufthansa to IAG, with the group's slot portfolio at Heathrow growing by an average of 42 daily slot pairs. In addition to taking a large loss on the sale to IAG, Lufthansa also had to pay hefty fees associated with the carrier's concurrent exit from the Star Alliance.

Having succeeded in capturing British Midland International - bmi, IAG was left with the carrier's low-cost and regional subsidiaries for which Lufthansa had failed to find buyers. IAG had stated all along that bmi Regional and bmi**baby** were not part of its long-term plans and any cost borne from running these businesses in the short-term, as well as closure costs, would have to be incurred by Lufthansa. A final acquisition price was, according to the German company, expected to be agreed by the end of

**"HAVING SUCCEEDED  
IN CAPTURING  
BRITISH MIDLAND  
INTERNATIONAL  
- BMI, IAG WAS  
LEFT WITH THE  
CARRIER'S LOW-  
COST AND REGIONAL  
SUBSIDIARIES THAT  
REMAINED UNSOLD  
BY LUFTHANSA."**

June. IAG has indicated that it will take approximately a year to fully integrate the 42 additional Heathrow slot pairs it has acquired. Initially it plans to concentrate on the former carrier's short-haul network and will attempt to return it to profitability by increasing seat capacity as well as using IAG's strengths in marketing. It is also looking further into the future; this will involve the transfer of some of its short-haul slots into BA's long-haul network. This increase will help BA to match its European rivals as it plans to increase its presence in the world's

British Midland upgraded its fleet in the late 1990s, signing a \$1 billion contract with Airbus for 20 A320 Family aircraft in March 1997. The carrier replaced its ageing 737 Classics with the new Airbus.







BRITISH MIDLAND INTERNATIONAL - BMI FLEET (AT THE TIME OF ACQUISITION BY IAG)						
Airbus A319-131	G-DBCA	2098	D-AVYV	C12Y126	1st ILFC	
	G-DBCB	2188	D-AVYA	C12Y126	1st ILFC	
	G-DBCC	2194	D-AVYT	Y130	1st ILFC	
	G-DBCD	2389	D-AVYJ	Y130	1st ILFC	
	G-DBCE	2429	D-AVWG	Y130	1st ILFC	
	G-DBCF	2466	D-AVYA	Y130	1st ILFC	
	G-DBCG	2694	D-AVXD	Y144	1st ILFC	
	G-DBCH	2697	D-AVXE	Y144	1st ILFC	
	G-DBCI	2720	D-AVWC	Y144	1st ILFC	
	G-DBCJ	2981	D-AVXG	Y144	1st AerCAP	
	G-DBCK	3049	D-AVYG	Y144	1st AerCAP	
	G-MEDM	1922	F-WW8X	C22Y102	1st BOCA	
Airbus A320-232	G-MEDK	2441	F-WW8Q	C22Y102	1st BOCA	
	G-MJDO	1987	F-WW R	C20Y108		
	G-MIDS	1424	F-WWBD	Y156	1st ILFC / Star Alliance c/s	
	G-MIDT	1418	F-WWBI	C20Y108	1st ILFC	
	G-MIDX	1177	F-WWDP	Y156	1st ILFC / Star Alliance c/s	
	G-MIDY	1014	F-WWDQ	C20Y108		
	G-MEDF	1690	D-AVZX	C31Y118	1st AerCAP	
	G-MEDG	1711	D-AVZX	C31Y118	1st DVB Bank	
	G-MEDI	2190	D-AVZD	C31Y118	1st BOCA	
	G-MEDL	2653	D-AVZC	C31Y118	1st RBSA	
	Airbus A321-231	G-MEDM	2799	D-AVZF	C31Y118	1st Falak Investments
		G-MEDN	3512	D-AVZX	C31Y118	1st HSH Nordbank
G-MEDU		3926	D-AZAB	C31Y118	1st HSH Nordbank	
II				Y195	oo-delivery 2012	
G				Y195	oo-delivery 2012	
II				Y195	oo-delivery 2012	
Airbus A330-243	G-WWBD	401	F-WWKN	C42Y156	1st MALLC Aviation/ Star Alliance c/s	
	G-WWBM	398	F-WWKL	C18W30Y170	1st ACGC / Star Alliance c/s	

emerging markets of Asia, Africa and Latin America.

These changes will require significant fleet adjustments, and already the carrier is to delay its plans to retire some of its older 747-400s as well as re-examining purchase options it holds for both the 787 Dreamliner and A380 Superjumbo, as well as seeking clarification from Boeing on its future development plans for 777 variants or a successor.

While initially indicating it would consider keeping the British Midland

International - bmi brand, IAG has since decided to fully integrate the carrier into BA, which could see the end of the brand in the near future, although it may continue to be used by bmi Regional on its Embraer jets for some time to come. BA has already commenced codeshares on some former's services across Africa, western Asia and the Middle East. It is rather ironic that many of these codeshare routes were inherited when British Midland acquired them from British Mediterranean Airways back in

At one point bmi operated three Airbus A330-200s on flights from London/Heathrow to Saudi Arabia and from Manchester to the Caribbean (and the US. By the time IAG took over it had two A330s in service, which will be returned to their owners when their lease agreements run out this autumn. *Airline*

2007, itself a former BA franchisee. The first of British Midland International - bmi's Airbus aircraft, an A319, G-DBCB, (c/n 2188) has been transferred to BA's Air Operator's Certificate (AOC) and repainted in the carrier's Olympic Dove livery, returning to service on May 28, 2012. Two additional A319s have also been transferred: G-DBCC (c/n 2194, May 29) and G-DBCH (c/n 2697, June 7), both of which have now been repainted in the carrier's normal colour scheme, and returned to service. *WJ*





# OFFICIAL SOUVENIR EDITION

A Royal Air Force 100-page tribute to the men, machines and exploits of Bomber Command

NEW



On June 28, a long-overdue national memorial to the 55,573 aircrew of Bomber Command who perished during World War Two will be unveiled in London's Green Park. To mark the occasion Key Publishing is presenting a special 100-page tribute published with the full support of the Royal Air Force. It pays homage to the men, machines and exploits of the UK's offensive air arm, 1936 to 1968. Created by the team behind *FlyPast* - Britain's top-selling aviation monthly - leading writers, researchers and illustrators combine to bring a comprehensive salute with exceptional narrative, first-hand accounts, archive material and many rare illustrations.

## Features include:

### Forever Legends:

The Green Park memorial and its legacy. Plus, the RAF Church at St Clement Danes, which was fire-bombed in May 1941 and rebuilt in tribute.

### Strike Hard, Strike Sure:

Exploits of Hampden, Halifax, Lancaster, Stirling and Wellington crews, supported by Orders of Battle showing how Bomber Command evolved.

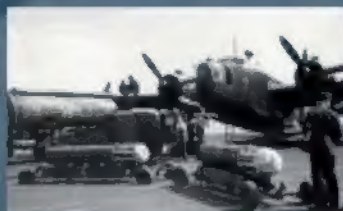
### For Valour:

Bomber Command's Victoria Cross awards.

### 'Cold War' Warriors:

The end of the prop era through to the jet age and ballistic missiles.

## AND MUCH MORE!



Available NOW from WHSmith and other leading newsagents.

ALTERNATIVELY, ORDER DIRECT:



Free P&P when you order online at [www.keypublishing.com/shop](http://www.keypublishing.com/shop)

or



Call UK 01780 480404  
Overseas +44 1780 480404  
Lines open 9.00-5.30, Monday-Friday



**SUBSCRIBERS CALL FOR YOUR £1 DISCOUNT!**

\*Free P&P valid on UK and BFPO orders up to a value of £19.99. EU £1.99, USA £2.99, ROW £3.99. Charges may vary if total order value exceeds this amount.



# nextmonth

The SEPTEMBER 2012 issue of  
**Airliner World** includes:

## C SERIES UPDATE

Airliner World visits Montreal to view the aircraft's development

## MAXIMUS AIR

Cargo opportunities in the UAE

## CAMBRIAN AIRWAYS

The story from its formation in the 1930s to its absorption  
into British Airways

## CANADIAN CHARTER CARRIERS

The 1970s was a boom time airlines in North America

## DESIGN AN OLYMPIC AIRLINE LIVERY

The results of what has proved to be a very popular competition

## PLUS FARNBOROUGH AIRSHOW REPORT

A detailed analysis of all the orders and announcements

Not forgetting Airliner World's comprehensive 20+ pages of  
global NEWS.

(contents subject to change)

**ON SALE AUGUST 8\***

(\*UK scheduled on sale date. Please note that the overseas delivery  
dates are likely to be after this date.)



key

Acronyms and abbreviations have become an intrinsic part of  
business speak. In the commercial aviation business their usage  
has become unavoidable and in the following table we try to  
guide you through some of those most commonly-used examples  
in the pages of Airliner World. This list will be regularly updated.

AAIB	Air Accidents Investigation Branch (UK)
ACAS	Airborne Collision-Avoidance System
ADR	Accident Data Recorder
ALPA	Air Line Pilots Association (US)
ANS	Airborne Navigation System
APU	Auxiliary Power Unit
ATC	Air Traffic Control
ATP	Advanced Turbo-Prop (BAe)
ATS	Air Traffic Service
BAe	British Aerospace (now renamed BAE Systems)
CAA	Civil Aviation Authority (UK)
CDA	Continuous Descent Approach
CEO	Chief Executive Officer
CIS	Commonwealth of Independent States (formerly Soviet Union)
c/n	Construction number
combi	Aircraft that routinely carry passengers and cargo on the main deck at the same time
CVR	Cockpit Voice Recorder
dB	Decibel
DTI	Department for Transport (UK)
DME	Distance-Measuring Equipment
EADS	European Aeronautics Defence and Space Company
EASA	European Aviation Safety Agency
ERAA	European Regions Airline Association
EROPS	Extended-Range Operations

ETOPS	Extended-range Twin-engine Operations
FAA	Federal Aviation Administration (US)
FAI	Fédération Aéronautique Internationale (France)
FAR	Federal Aviation Regulations (US)
FBO	Fixed Base Operator
FDR	Flight Data Recorder
FL	Flight Level (usually expressed in hundreds of feet)
FOD	Foreign Object Damage
GA	General Aviation
GAPAN	Guild of Air Pilots And Navigators (UK)
GDP	Gross Domestic Product
GE	General Electric
GECAS	GE Capital Aviation Services
GMT	Greenwich Mean Time
GNS	Global Navigation System
GPS	Global Positioning System
GPU	Ground Power Unit
IACA	International Air Carrier Association
IAP	International Airport
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IFALPA	International Federation of Air Line Pilots Associations
IFR	Instrument Flight Rules
ILFC	International Lease Finance Corporation
ILS	Instrument Landing System
IMC	Instrument Meteorological Conditions
INS	Inertial Navigation System
JAA	Joint Aviation Authorities (European)
LCC	Low-Cost Carrier
LCD	Liquid Crystal Display

LED	Light-Emitting Diode
localiser	Steering guidance element of an ILS system
LORAN	Long Range Aid to Navigation
MD	Managing Director
MLS	Microwave Landing System
MLW	Maximum Landing Weight
MoD	Ministry of Defence (UK)
MoU	Memorandum of Understanding
MRO	Maintenance, Repair and Overhaul
MTOW	Maximum Take-Off Weight
NASA	National Aeronautics and Space Administration (US)
NATO	North Atlantic Treaty Organization
NBAA	National Business Aircraft Association (US)
OFT	Office of Fair Trading (UK)
PAPI	Precision Approach Path Indicator
PAR	Precision Approach Radar
pax	Passenger
P&W	Pratt & Whitney
PPL	Private Pilot's Licence
PR	Public Relations
RFP	Request for Proposals
RVR	Runway Visual Range
SARS	Severe Acute Respiratory Syndrome
SID	Standard Instrument Departure
STAR	Standard Terminal Arrival Route
STOL	Short Take-Off & Landing
TCAS	Traffic alert and Collision-Avoidance System
TWR	Tower — airport control tower
VASI	Visual Approach Slope Indicator
VFR	Visual Flight Rules
VMC	Visual Meteorological Conditions
VOR	VHF omni-directional range (radio beacons)



# AirNav RadarBox-3D



**AirNav Systems**

The Most Trusted Name in Flight Tracking

For Latest Information Check:  
[www.airnavsystems.com](http://www.airnavsystems.com)

Now Recognised As A Leader  
In PC "Desktop Radar"

**SEE AIRCRAFT LIVE!**  
**SEE ALL THE INFO!**

**-HEIGHT**

**-SPEED**

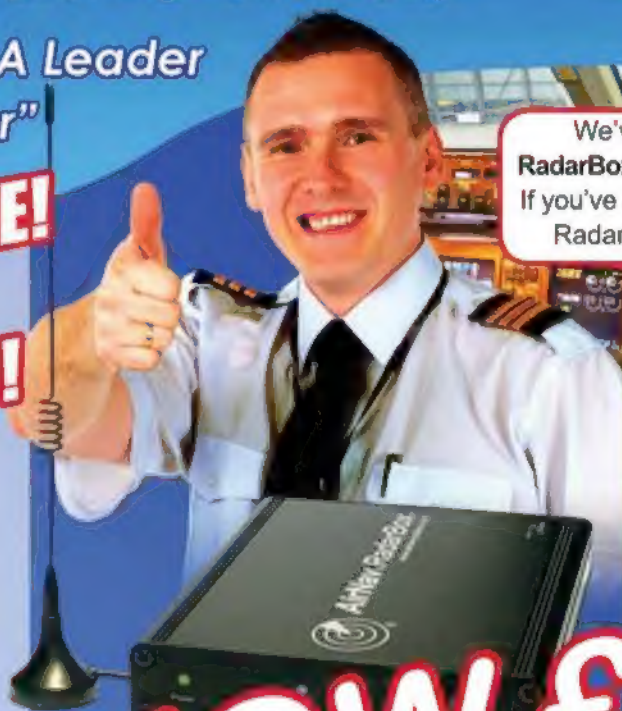
**-REGISTRATION**

**-LIBRARY PICTURE**

**-DEPARTURE**

**-DESTINATION**

RadarBox-3D £489



We've lowered the price of the  
**RadarBox-Pro** by £100 from £399 to **£299!**  
If you've always wanted to try the AirNav  
RadarBox now is the time to do it!

**NOW £299!**

Free Next Working Day Delivery

To Order Now Call  
**01702 206835**



Special Educational  
discount to approved  
organisations.

## SHIPTRAX also from AirNav Systems

**NEW** See the exact position of Ships Worldwide!

ShipTrax is an advanced Windows based Ship Tracking application. It receives ship data from various sources (AIS, TCP/IP, AIS Nees works) allowing you to track ships worldwide in real-time. Just plug the supplied receiver into the USB port of your PC and load the software. The supplied miniature antenna picks up the data - LIVE!

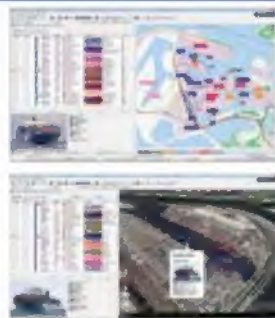
Data displayed on maps includes Vessel name, Position, Photo, Location, Speed, Track, IMO.MMSI, Call sign, Vessel type, Length and voyage details. Also includes personal log book. Now you can track your favourite cruise liner wherever it goes!

**ShipTrax-Pro £399**

The standard system that includes receiver, antenna and software. It provides a flat display on your PC/laptop screen and is ideal for normal use.

**ShipTrax-3D £489**

The 3D version adds the dimension of Google 3D mapping systems that gives the most realistic views possible in great detail and is particularly effective for river traffic and docks.



**WATERS & STANTON**

Order Online At  
[www.wsplc.com](http://www.wsplc.com)

To Order Call: 01702 206835 Or Visit Us At:  
W&S, 22 Main Rd, Hockley, Essex, SS5 4QS, or  
Jaycee, 20 Woodside Way, Glenrothes, Fife, KY7 5DF

### This Product Is Available From These Dealers

Transair	5 Locations	01273 466000
Airplan	Manchester	0161 4990023
Radio World	Birmingham	01922 414796
Lam Comms	Doncaster	01226 361700
Rocket Radio	Letchworth	01462 675481

Airband-Online	Macclesfield	07876 561041
Air Supply	Leeds	0133 2509581
Jaycee Elec.	Glenrothes	01592 756962
BHI Ltd	Burgess Hill	0845 2179926
Coastal Comms	Clacton-On-Sea	01255 474292
Flightstore	West Yorkshire	01924 509273
The Aviaton Shop	Manchester Airport	0161 4892444
SE Comms	Eire	353 51 389666

K.K.Electronics	London	020 74024592
Calec	Belfast	07533091146
Harry Mendelsohn	Edinburgh	0131 4477777
Javiation	Bradford	01274 639503
Anchor Supplies	Nottingham	0115 9864902
The Flying Shop	Biggin Hill Airport	01959 579800
Moonraker	Buckinghamshire	01908 281705
ML&S	Chertsey	0845 2300599



# Mode-S Virtual Radar

# The SBS-3

## 3 Receivers in one box!

ADS-B / AIS / Marine band / Air bands (VHF and UHF) Multi-Device - Multi-Band - Multi Channel Software Defined Radio Receiver / Decoder

The SBS-3 follows on from the very successful SBS-1, SBS-1 Mk2, SBS-1e and SBS-1er and it adds the new features of SDR AM/FM receiver covering a wide range of frequencies including the VHF and UHF Air bands, the VHF Marine band and the broadcast FM band.

Provides a true Real-Time Virtual Radar display on a PC or MAC screen showing Mode-S/ADS-B equipped aircraft and AIS equipped vessels immediately around them.

Performs all demodulation and decoding operations internally, without the need for any third-party software or any other PC software, enabling genuine stand-alone operation. This unique design means that numerous audio/data streams can be monitored simultaneously and remotely.

Works as either a Client or a Server which enables you to either connect to it, or it can connect to a designated server over the local network or indeed the internet, for true stand-alone use.

Powered via the USB connector, either by a PC, a standard USB Hub or an in-car charger outlet.

Flexible design with a phenomenally large FPGA, allowing for future additional on-board decoders for formats such as ACARS, POCSAG and many others.

Revolutionary hardware product that combines with the included display software and allows aviation, marine professionals and enthusiasts worldwide, the ability to monitor the skies and seas in an unprecedented fashion.

Also compatible with PlanePlotter and ShipPlotter, including their latest functionality.

**True stand-alone SDR receiver, unlike the majority of so-called SDR receivers on the market, which are, in reality, just digital tuners!**

Designed to protect your investment for the years to come and is backed by Kinetic's traditional commitment to never charging for firmware updates.

**Available from stock: £499.95**  
**FREE UK mainland shipping!**

For further information see [www.VirtualRadar.co.uk](http://www.VirtualRadar.co.uk)

**Now with  
full ACARS  
Capability -  
Built-in!**

The Kinetic SBS-3, a unique and revolutionary product, built on the heritage of their SBS-1 range of receivers. We are an authorised retailer of this unique class-leading product and have sold more SBS-1's than any other retailer in the world.

The SBS-3 features include:

- An improved design 1090MHz Mode-S, ADS-B receiver.
- Dual independent 27MHz to 980MHz SDR Tuners with 8MHz Bandwidth per tuner. Listen to multiple stations at the same time.
- Listen to VHF on one tuner, UHF on the other and digitally mix the two together.
- Full speed 100M Ethernet interface with concurrent multiple sockets.
- On board digital audio mixing plus stereo output DAC and audio interface.
- Audio output over Ethernet
- Raw Data output for Mode-S, AIS, and all other demodulations such as ACARS.
- Onboard processing and demodulation - NO PC REQUIRED. Ideal for remote site monitoring
- I<sup>2</sup>C Options interface for external controllers and peripherals. LCD Touchscreen controller (due soon)

## AirNav RadarBox & RadarBox-3D



There is more excitement amongst RadarBox users and potential users now that the 3D version of the RadarBox is available. This radical software upgrade brings to life the RadarBox with superbly detailed Google Earth mapping overlay. This is a major advantage that puts RadarBox firmly on top of it's competitors. You can see crisp, clear screenshots with pictures of the aircraft in 3D and their precise position shown on the map. RadarBox has always given the best graphics of any system, and this latest addition really underlines the superiority of RadarBox. Known as RADARBOX-3D this complete system is available from all good communications dealers around the world. There is also an upgrade disc available for all existing users of RADARBOX-PRO, order this upgrade as RADARBOX-UG. RADARBOX-PRO is still available for those users who want a radar decoder without Google Earth and 3D.

**RadarBox-3D.**  
**ML&S: £489.00**

**RadarBox-Pro.**  
RRP: £399.00

**Special Offer: £289.95**

**SAVE £110!**

**Only whilst stocks last!**

**CONTACT US**

**CONTACT US**  
Martin Lynch & Sons Ltd.  
Outline House, 73 Guildford Street,  
Chertsey, Surrey KT18 9AS  
Web: [www.VirtualRadar.com](http://www.VirtualRadar.com)  
E-mail: [sales@virtualradar.com](mailto:sales@virtualradar.com)

#### OPENING HOURS

Monday to Friday: 9.00am to 5.30pm  
Saturday: 9.30am to 4.30pm

**Tel: 0345 2300 599**

Int'l. No: +44 (0) 1832 587 333

### FRIENDLY HELPFUL ADVICE

**WE PRIDE OURSELVES ON OUR CUSTOMER SERVICE.** We believe that it has been instrumental in making us the number one choice for thousands of loyal customers.

### SAFE ONLINE SHOPPING

Shopping online with ML&S is safe and secure. E&OE



**FOLLOW US ON TWITTER**



HamRadioUK